

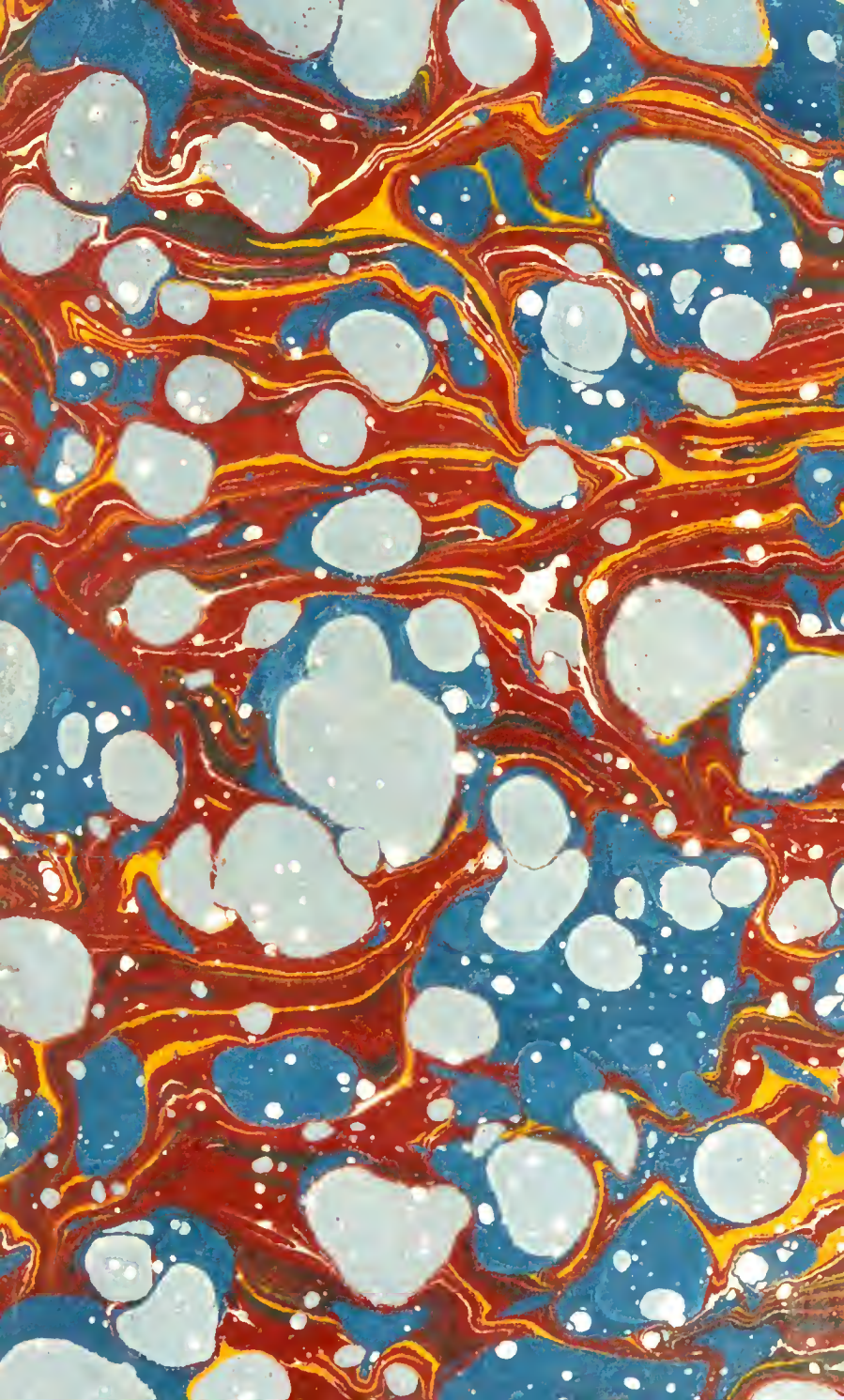




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University Pamphlets.

I.—ACTUALS.

BY

THE EDITOR.

SECOND EDITION.

Glasgow:

ROBERT L. HOLMES,

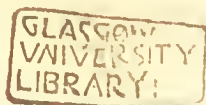
3 AND 5 DUNLOP STREET.

1883.

ADDRESS TO THE READER.

I AM not a lover of Antiquity. I think there is no age of the world in which I would have wished to live rather than our own. Former ages had dead flies in their ointment as well as we. They had to remove the dead carcase of Antiquity just as we have to do; and the mistake men make now is the mistake made then, of preserving in a false appearance of life what has long been dead. Perhaps we are tenderer to our dead than they were, and hurry them less roughly off the scene. That is a fault that leans to virtue's side. Removed, however, they must be, and in proportion to the tenacity of the nuisance will be the violence necessary for its removal. This pamphlet is one small factor on the side of sanitation. May it prosper!

MEDICUS.



NOTE TO SECOND EDITION.

I TAKE the opportunity afforded by a second issue of this pamphlet to declare my continued adherence to all I have said in it. The three months that have passed since its first appearance, and the criticisms I have received, have not revealed anything to make me repent of its publication. I only regret that it is such a feeble statement of the evil that exists. I regret that my pen is not dipped in fire sufficient to burn into the hearts of the men who have the power without the will to reform. I regret that there are abuses in our Universities that I have hitherto left untouched.

But I rejoice that the little flame is spreading. Here and there it has touched with its fire men who had not before thought of these things. It is manifest to a larger number than before that a great reform is at hand. A larger number than before are now interested in our Universities; and, when the reform comes, it will be more thorough, less temporising, and better supported by "enlightened public opinion."

For the cause of Reform this pamphlet was written. May it continue to live till the reform is accomplished! Then may it seek "the wave of river Lethe and Oblivion long!"

MEDICUS.

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HISTORICAL.

ON 7th January, 1450, Pope Nicholas V. granted a Bull, constituting, in the city of Glasgow, "A general resort for Study in Theology, in Ecclesiastical Law, in Civil Law, in Arts, and in any other lawful subject of study."

This was the origin of the University of Glasgow. It had neither funds nor property. "It came into the world as *naked* as every individual does." It had not even a house to cover its head, and had for a time to carry on its work in the Crypt of the Cathedral or the Chapter-house of the Predicant Friars.

Theology and the Laws, which were mainly the study of Churchmen, continued in immediate connection with the Monasteries, but in 1459 the Arts obtained a building for themselves, which was called the Pædagogium. Hither came all who were desirous of learning. No fees were demanded. Food and lodging were provided. A rigorous discipline was enforced, and in due time—probably in about three or four years from their entering—the students were presented to the Chancellor to receive their degrees.

When a man received his degree of Master, he became by that fact a teacher of "Arts"—a regent—and took an oath to teach for two years in his own university. After the two

years of this "necessary regency," some still remained at the University. The rest found occupations elsewhere, many of them probably entering the religious houses to carry on what were considered the higher studies of Theology and the Laws.

The aim of the University was the advancement of learning and not the acquisition of wealth. Yet it gradually became wealthy from the gifts of men who had themselves received instruction from it, and of others who knew the value of knowledge. So careful was the University that the students should be at no expense that it even purchased for them the hoods they had to wear, and as books were excessively dear, and were rarely *private* property, it lent them also the books they needed. But each student gave as he could. The poor man might give nothing. The noble might give money or land or valuable privilege. James, Lord Hamilton, *e.g.*, in 1459 bequeathed the ground on which the "Old College" stood for four centuries, merely on condition that after dinner and after supper the regents and students should, in all future time, pray for his and his relatives' souls.

It is not easy for us at this distance of time to know what the "Arts" were, for though the name has descended to us, the thing has in great part become extinct. They comprehended "Logic, Physics, and Morals," of which it is enough to know that they denoted the non-professional as distinguished from the professional knowledge of that old time, and that their foundation in a "Pædagogium" was a mark

of the esteem in which knowledge was held. We better note in passing that there is no mention of the study of languages. We may note also that medicine, which is in our day one of the four "faculties," was not recognised in the Bull of Pope Nicholas, although it was included among the faculties when William Elphinston, a member of Glasgow University, founded in 1496 the University of Old Aberdeen.

In 1560, about a century after the "Old College" was opened, the Reformation in Scotland occurred. Theology and the Laws, which were so closely bound up with the Roman hierarchy that they had not even separate houses of their own, fell with the fall of the Roman Catholic Church, and the only "Faculty" left in existence was that of "Arts." To this the Reformation was a benefit, in that Queen Mary gave it the buildings and rents and ground which had formerly belonged to the Friars Predicators, and the city gave it all the other properties, rents, &c., which had belonged to the other religious houses within its bounds.

In 1577 King James VI. gave it the valuable "rectory and vicarage" of the Parish of Govan, and at the same time so modified its constitution that his action has been called a "Nova Erectio" of the University.

At this time then—one hundred and twenty-seven years after its foundation—Glasgow University is no longer naked, though it is by no means rich. It has a house and lands, and even some money. It has eight officials; a principal, three regents, a steward, a cook, a porter, and a servant of

the principal,—all of whom have fixed salaries. To this little household are added four bursars—poor students supported out of the University revenues, and chosen on account of their poverty and intellectual promise. This number of persons is even less than the number five years before, when there were fifteen in the University.

The course of study lasts about four sessions, and each session occupies the most of the year. In addition to the four sessions each student who takes his degree is required to assist in the teaching of the University for two years after taking it, and can be freed from this duty only by the consent of the masters. There are no fixed fees. All who desire knowledge, and are fit to acquire it, are welcome. The rich people who attend the University are required to give gratuities to their teachers, and even to add to the endowments of the College. But however strictly the University may insist that the wealthy pay their “honoraria,” there is always special provision made that the poor pay nothing. The teachers and students, and where the students are wealthy, even the students’ serving men, live under one roof, and are subject to the same discipline. Each student has to pass an examination before admission to the University, and at the end of each year is examined before he leaves the lower regent for the one above him.

The subjects of study are thus distributed :

The first regent teaches Rhetoric and Greek.

The second regent teaches Dialectics, Morals, Politics, and the Elements of Arithmetic and Geometry.

The third regent teaches Physiology, Geography, Chronology, and Astrology.

The principal teaches Theology, Hebrew, and Syriac.

Here again most of the subjects are now extinct, and even where the name has survived, the thing it represents has completely changed. It would be interesting to fall in with a set of regents' lectures kept by some diligent student in the end of the 16th century. Such a set, however, probably never existed. Students then *listened* to lectures, and did not write them down in note books. Languages have been introduced into the course. The old ecclesiastics were so ignorant of Greek that some declared it an invention of the Reformers, especially as a dangerous book called the New Testament had been printed in it, while of Hebrew they said that whoever learnt it at once became a Jew.

But while Hebrew, Syriac, and Greek are taught, Latin is not mentioned, simply because every student required to know Latin before entering the University, where all the lectures were delivered in that language. Latin was also the language of conversation, and a student was punished if he spoke his mother tongue within the walls of the College.

In this curriculum we have also the beginnings of Physical Science: Arithmetic and Geometry,—the introduction to pure Mathematics, and Physiology, &c.,—the introduction to what is now called Physics.

Since the 16th century the mastery of Man over Nature, which is represented by the word "Knowledge" or "Science," has gone on increasing by leaps and bounds, and what was

then fairly represented by four Chairs, is now very inadequately represented by 27. These were founded in the following order:—

1577. Logic and Rhetoric, Moral Philosophy, Natural Philosophy.

1581. Greek.

Before 1637. Humanity.

1637. Practice of Medicine.

1640. Divinity.

1691. Mathematics.

1709. Oriental Languages (Hebrew and Arabic.)

1713. Law.

1716. Ecclesiastical History.

1718. Anatomy and Botany.

1747. Chemistry (made a Professor in 1817.)

1760. Astronomy.

1766. Materia Medica (made a Professor in 1831.)

1807. Natural History.

1815. Surgery and Midwifery.

1839. Physiology and Medical Jurisprudence.

1840. Civil Engineering.

1861. English Literature, Biblical Criticism, Conveyancing.

1874. Clinical Medicine and Clinical Surgery.

In addition there are Lectureships:—

1828. Diseases of the Eye.

1878. Public Law and Constitutional Law.

GETTING UNDER WAY.

"As strange a maze as e'er men trod."

GREAT is the power of names. Because the establishment at Gilmorehill is called a University, it is respected—almost revered as a holy place by the public. To send his son to the University is still regarded by the pious Scotchman as a purpose worth struggling for, even worth starving for. To be at the University is still regarded by those who have not been there as a proud distinction. But there are signs that this infatuation is near its term. The pretensions of the University are getting seen through. Its imbecile struggle to keep abreast of the time while yet retaining its middle-age machinery; its old-fashioned monopoly, obstructing its own progress and the progress of education in Scotland; its protection of its professors, who, if they are worth anything, need no protection, and if they are worth nothing, ought to have none; its antiquated systems of teaching; its blindness to modern methods, and even to modern ideas of education; its absurd management of business; all these and many more evils which have transferred the University from the front to the rear in the march of human progress are becoming evident even to the general public. When we see everywhere the University stamp

upon the brow of ignorance, giving a cloak and a licence to the hypocrite, calling the incapable capable and the ignorant learned, it is time for us to ask—why such an institution should exist? The evil it is doing is manifest, and if the evil is inherent in its nature it will need to be swept utterly away; but if the evil is a mere accident of its constitution—What should be the method of reform?

It is the purpose of this series of pamphlets to show that while the University might be made, what it was some centuries ago, a powerful engine of education, it can only be made so by radical changes of a serious character. If these changes cannot be carried out, the University must cease to exist, since, in its present condition, it is doing evil and not good to the cause of progress. It is an immense sham itself, and the prolific mother of shams, and we may hope that however powerful, however ancient, however respected, the reign of shams must end.

THE FACULTIES.

“Studium Generale.”

THERE are four departments in the University which bear the antiquated and now meaningless name of “Faculties.” Of these the purpose of the Faculty of Arts is to make its students educated or learned men. The purpose of the other Faculties is to make their students, who are already understood to be learned persons, either doctors or lawyers or clergymen. There is no reason given for the exclusion of other departments of human activity, such as Teaching, Architecture, Painting, Sculpture, Carpentry, Music, Engineering, Weaving, Shipbuilding, Mining, and many others which have as much right as Medicine, Law, and Theology, to a place in the list of human professions. There is in reality no reason for their exclusion, except that they have grown into importance only in modern times, after the University had received that stereotyped form which is cramping its energies and making it an obstacle instead of a help in the way of men.

What right, for example, has a medical student to privileges which are denied to the student of painting? If the one has a right to claim the support of the public, the other has a right also. But there is no right in either

case. The collier has to learn his trade by his own exertions without the favour of the public, and is paid always by poverty, and often by contempt. The medical student receives public money to assist him to future wealth, and the respect that wealth secures. This is an injustice that must terminate. Napoleon's motto, "*La carrière ouverte aux talents*," must be obeyed, and the University must show as little favour to Medicine and Law and Theology as it shows to other trades which are left to fight their own battle in their own behalf.

We shall have to return to these faculties again, but we must now consider that one which is the only proper occupant of the University.

THE FACULTY OF ARTS.

"Quam in Artibus."

THE name is no guide to the thing. The department of Arts is one in which no Art is taught, except the Art of Hypocrisy, which is cultivated all over Gilmorehill with excessive care. And, as the name is antiquated, the course of study which it indicates is antiquated also. Four centuries ago it covered all the knowledge that men possessed, except the specialities of Theologians and Lawyers. Now it does not cover the one-hundreth part of human knowledge. Four centuries ago it formed a complete and closely articulated course of study, the student passing only as he was able from the lower to the higher class. Now it is a jumble of disconnected atoms, hardly any two of which have an organic connection, and the student may enter any class in any year at any stage of his progress. Centuries ago no student could enter the University, or even leave one class for another, until he had been found fit by examination. Now there is neither an entrance nor a leaving examination. Centuries ago a Degree in Arts was a proof of learning. Now it represents the educational status of a grammar-school boy.

The reason for this marked decline in efficiency is sufficiently obvious. The University has not been able to

recognise and adapt itself to the advance of knowledge. It has thought more of itself than of learning. It has been so eager to retain its hold upon the fountains of knowledge, and to preserve its monopoly, that it has been left grasping a dry rock, while the fountains have sprung up elsewhere. Neither seven nor seventy Chairs could now represent the sum total of human knowledge, and the poor University shuts its eyes to that great fact. Its own seven Chairs have got so separated from one another by long reaches of Science that they can no longer form a course of training. But the University has not now, as it had of old, a definite opinion as to what a course of training is, so it clings in desperation to the meaningless course it has inherited.

Yet it remains true now, as it was in 1450, that the only true education is by a definite course of study, proceeding from a low beginning onwards to higher and higher platforms, until the student has reached the highest attainable. Education is a progress, and not a ramble. Still less is it a series of excursions such as an Arts course supplies. An M.A.—and it is only a few students, hardly one in three of those who enter, who are sufficiently advanced to take that cheap Degree—is a person who has nibbled at several subjects of study, but may, or may not, be an educated man. His Degree is no guarantee of education. If he is educated, we may say it is in spite of the efforts of the University, which has done its best to dissipate his strength and undermine his character.

“WE ARE SEVEN.”

IN the Arts Faculty there are nine Chairs:—(1), Humanity; (2), Greek; (3), Logic and Rhetoric; (4), Moral Philosophy; (5), Natural Philosophy; (6), Mathematics; (7), Astronomy; (8), Civil Engineering; (9), English Literature.

The Chair of Civil Engineering was founded in 1840, and as the University is too conservative to break its antiquated style, a Faculty of Engineering was not formed to receive it, but it was thrust into the same department as Latin and Greek. The University, however, was not absurd enough to make Engineering a subject of study required from all of its students. It accordingly remains excluded from the Arts course, and is studied only by those few students who are looking forward to Engineering as their work. It is as much a special Faculty as Medicine or Law.

The Chair of Astronomy has an anomalous position, hanging between the Heaven of University recognition and the Hell of utter neglect, but much nearer the latter than the former. Founded so long ago as 1760, it has never achieved for itself a recognised place in the course of study. It teaches no money-making art as the Chair of Engineering does, and it is considered of less importance

to students than Latin or Greek, so it sits in perpetual eclipse, and only those attend it who have a personal liking for the subject and leisure to cultivate it. The number attending the class may be, perhaps, half-a-score per session, and as the fee is only one guinea, and the endowment only £298 12s. 9d., the Professor of Astronomy has about £310 a-year, while the Professor of Latin has over £2,000.

This enormous difference arises from the fact that while Astronomy *is not*, Latin *is*, one of the seven subjects which constitute, according to the University, a course in Arts, and qualify a man to go forward to the M.A. Degree. Happy seven! They draw to themselves the fees of all who desire to be called learned, for a learned man, the University informs us, is one who knows seven subjects, or rather who has sat a certain number of hours under seven professors.

The Chairs which form this mystic fortunate number are Latin, Greek, Mathematics, Logic, Moral Philosophy, English Literature, and Natural Philosophy, and the time occupied by them is usually four sessions of about five and a-half months each. Even were they well taught, these seven subjects are quite inadequate to represent the requirements of modern education. And the time devoted to them, the methods of teaching them, the entire want of co-ordination and co-aptation among them render even their proper teaching impossible.

On each of these points we must dilate a little.

THE INADEQUACY OF THE SUBJECTS TAUGHT.

“Rari nantes in unda.”

MODERN Science has taken a wide range. The literature of almost every country has its assiduous students, and Latin and Greek are not now the only languages of classic authors. English has gained a tardy recognition in the University, but what of French, and German, and Italian, and Spanish, and Sanscrit? What of the immense fields of the oriental languages which are being cultivated by scholars wherever learning is esteemed? What, even, of the languages of our own Teutonic and Celtic ancestors? What of Philology itself? The founders of our University knew nothing of these, and because *they* knew nothing, their modern representatives still shut their gates against them.

Logic and Moral Philosophy, once considered the subjects of highest importance in a course of study, are now the faded ghosts of what they were. Ghosts as they are, however, they still usurp the place of living things. The present occupants of these Chairs have partly recognised this, and while they cannot ignore Logic and Moral Philosophy altogether, they crush them into a corner, and

occupy their pupils, the one with a vapid Psychology, and the other with a fragmentary History of Philosophy. The modern Science of Logic is at present entirely ignored, and only the fringe of modern Ethics is touched. Politics, Ethnology, and all the wide domains of ancient and modern History have no place whatever.

Mathematics and Natural Philosophy, which are the two remaining of the seven, embrace within them at least a dozen subjects, each of which would be a sufficient task for one teacher. They are, accordingly, touched in the most superficial way when they are touched at all. They cannot be said to be taught. They comprehend between them the wide field of Physical Science, but the equally wide field of Natural Science has no place whatever in the curriculum, simply because it did not exist when the University was founded.

It is thus evident how poor the University course is when compared with the field of knowledge that ought to be cultivated. But the poverty will be seen to be squalid and abject want when we consider the other points we have stated.

THE TIME DEVOTED TO TEACHING.

"Short and sweet."

"Few and far between."

IN the Arts course there are four sessions of five and a-half months each, or about twenty-two months altogether. The time occupied is, therefore, less than two years, or, let us say, two years, with a month's holiday in each. Out of every four years, therefore, there are two years and two months during which the class-rooms are empty, class-work is at a stand-still, and the professors and students may study or not, just as they please.

But, no doubt, they use well the twenty-two months of attendance at classes. During this time they are at such high pressure that they require twenty-six months to recover equilibrium! Here is a calculation on that point made about a year ago. In Professor Ramsay's Junior Latin Class there are 400 students. This class is divided into two sections, each of which meets two hours a day. There are, say, 115 working days in the session, and this will give 460 hours to a class of 400. Allowing half-an-hour daily for professor's lectures, explanations, &c., there are 230 hours left for the examination of students. It is said that each student is examined from five to ten times, say six times, in the course of the session—that is, once a month. That will make 2,400 examinations in 230 hours, or about eleven per hour—that is, *five* minutes to each student. The case then stands thus:—Each student in

the Junior Latin is examined once a month for five minutes, making a grand total of half-an-hour in six months. But Professor Ramsay has two assistants. It appears, then, that Professor Ramsay examines each student for about ten minutes every session.

This case is monstrous enough, but even more monstrous is the case of the Senior Class of 200 students. This class meets one hour a day, or 115 hours a session, giving about fifty-eight hours for examination of students. Each student is examined, say as before, six times, making about 1,200 examinations in fifty-eight hours, or twenty-one per hour. Each senior student, therefore, is examined for three minutes every month, or eighteen minutes in the session.

This calculation was based upon statements made by professors themselves, either actual or prospective, and it presents the case in the most favourable light possible. Taking the classes together, no student is examined six times in each class. I know of one student who in his last two sessions attended five classes, and was examined twice. In three out of the five classes he was not examined at all, and only once in each of the other two. Put in figures, he was examined in each class two-fifths of a time! Such a case is by no means an exceptional one. The classes are so large, the teachers so few, the time so short, that it is a simple impossibility for students to get teaching at the University. There is only a sham teaching—a means of procuring large salaries to professors, and a lying semblance of education to students.

THE METHODS OF TEACHING.

“A matter of historical fact.”

THERE are two distinct methods of teaching—that of private tuition and that of public lecture—which, according to Professor Jebb, have been associated in Scottish Universities. “The essence of private tuition is that the teacher addresses one pupil at a time, and studies his individual requirements. The other method of teaching by public lecture addresses students collectively. The method of teaching proper to a school is in the nature of private tuition. The method proper to a University is that of public lecture; and, as a matter of historical fact, it is this which Universities have always employed.” So far Professor Jebb. But historical fact is too often what it is with him, historical fallacy. The historical fact is as follows. The University session originally lasted throughout the year. It was a time of work, and not of half play. The students were from early morning till evening under the eye of their professors, then called regents. Prelections were delivered in the morning, and the students were again and again examined upon them during the day. The printing press was unknown when the University was

established, and the only possible means of communicating knowledge was by public lecture. But as printing became common, and the process of printing a rapid and cheap one, the system of lecturing was recognised as superseded, and the University—for the University was then eager for progress, and not, as now, eager to oppose it—ordered that lectures should cease to be given, and that printed books should be used instead, so as to save the time and labour of the student. Let Professor Jebb endeavour to discover how it happened that, in spite of this regulation, the professors have continued a custom of the fifteenth century down to our own time, and he may light upon historical facts of some interest and value to him in his position of *advocatus diaboli*.

With regard to the saving of time and labour, here is another calculation. The student writes every word he can of what his professor says, and learns it by his reading of it at home. The labour entailed on the student may be conceived when I say that to copy out one hour's lecture will take a careful student about three hours' pure drudgery, and even at the end he will have but an imperfect copy of what the professor said. It appears, then, that each careful student has to expend four hours' mechanical work upon each lecture before he has it in a readable condition. Say there are eighty lectures in a session. He has then 320 hours' mechanical drudgery, or forty days of eight hours each, or six weeks of six working days each in a session of six months. The pro-

fessors boast that their students work hard, and grow visibly paler and thinner as the session wears on. What wonder, when to their reading they have to add six weeks every session of assiduous clerking! If there were no printing press this state of things could not be helped; but what prevents the professors from printing their lectures at the beginning of the session? The students would be only too glad to pay for a perfect copy of the session's lectures the half-crown or crown they at present pay for note-books alone. Six weeks per session would be saved. Health would have some chance of remaining uninjured by the session's work, and much more work of a profitable kind could be done.

Here is another arithmetical sum. Each student in a class of 200 has each session six weeks of pure drudgery. This makes 1,200 weeks of students' time, or about twenty-three years each session. It appears, therefore, that each session of say the Logic Class costs twenty-three years of unnecessary and worse than profitless labour, or, in other words, every two sessions of such a class implies the complete waste of one human life.

But the method of public lecture is not only a serious and unwarrantable injury to the student, and a scandalous waste of time for the professor, it is not a method of teaching at all. It is a method suited to exhortation, excitement of sympathy, encouragement, &c., such things as are desirable in an assembly meeting in a church, where information is only a secondary matter, but not at all

suited to a class-room where information and intellectual culture are the chief things aimed at. In a church, the oft-deluded flock accepts the minister's statements as infallible, or, at least, unquestionable, but in a class-room the student must accept no professorial *ipse dixit*, but must examine, and accept or reject, every statement by the light of his own intelligence. The only method of teaching, in fact, is that which Professor Jebb calls "private tuition"—the personal intercourse of teacher and pupil, the constant examination by the teacher of his pupil's progress, and the constant adaption of his teaching to his pupil's needs. And, "as a matter of historical fact," this is the method which Universities have employed from their institution almost down to our own degenerate time. Any other method is a sham.

So far as concerns the teaching of their students, Professor Veitch, Professor Caird, Professor Nichol, and all who, like them, occupy the session with mere courses of lectures, might as well print their lectures, present the volume to the student at the beginning of the session in exchange for his fee of three guineas, and close the doors of their class-rooms. By so doing they would at least save their students and themselves many hours of wasted labour, while they would reveal the immense profits they make from their lucrative business of lecturing!

A very good book on Logic, for example, may be had for three shillings and sixpence, and even Mill's large work may be had for less than a guinea, while Professor Veitch

charges three guineas for his course of lectures—a course which would be dear at a guinea. How much too dear then at three guineas, *plus* the time expended in hearing and writing it out!

Do you ask me, simple reader, why the Professors do not print their lectures? “Tell it not in Gath: publish it not in the streets of Askelon”; let me whisper it in thine ear; there are two all-sufficient reasons:—

(1.) Because, if printed, they would be exposed to public criticism, and very probably to public ridicule.

(2.) Because, if printed, the Professors would no longer have the easy task of reading lectures, but the more difficult one of explaining and illustrating them to their students.

The lectures are good when delivered in a lofty tone of voice, and with an air of authority, to a set of ignorant youths; but when analyzed by a competent critic, what are they?

THE WANT OF ARRANGEMENT IN THE SUBJECTS OF STUDY.

“Rudis indigestaque moles.”

EDUCATION, we have said, is a progress, and not a ramble. It is a gradual ascent from ignorance to knowledge. In former times there was only one recognised path by which this ascent was possible, and Universities were instituted to preserve it and keep it open. But in our time there is hardly a limit to the number of approaches to learning. All roads lead to the end of the world. Start anywhere, and with any subject, a persevering industry will make you a learned man. The only essential requisite is a steady, forward, upward march. The only essential hindrance is an unsteady attention given now to one subject, now to another, without any resolute or profound study of either. And the University, by its blind adherence to an old path which has been fissured and torn into yawning chasms by the ravishes of centuries, instead of preserving the requisite of education, has fostered its hindrance. At first the course of study was such that the first year led by regular gradations through the second and third to the fourth, in which the student's course was

complete. No break could be made. If the student had not gone through the lower subjects he could not enter the higher. In our time it is quite different. The course of study is no course at all. A student may begin with any subject and end with any subject he likes. One subject does not lead to another. The mis-named course is a heap of disconnected atoms,—truly a royal road, not to learning, but to the pretence of learning.

The University itself has been unable to blink this fact; but it admits it as grudgingly as possible. It divides its course into three parts:—(1), the Classical, containing Latin and Greek; (2), the Mathematical, containing Mathematics and Natural Philosophy; (3), the Philosophical, containing Logic, Moral Philosophy, and English Literature. But while it admits that these are distinct departments, it will not allow any student to devote himself to one of them so as to become really learned. He has to learn all three, and so dissipate his energies, and, as usually happens, lose his taste even for that department for which he is naturally fitted.

The evil resulting from this becomes even more evident when we look beyond the admission of the University, and examine the departments it admits to be distinct. We find that not only are the departments separate, but the classes in the departments have no connection with each other. The only department in which there is even a slight connection is the Mathematical, but here, as elsewhere, the student may enter the highest class without being fit for

the lowest, and may brandish about his certificate of having studied in that class, so as to prove to the world, on the authority of Glasgow University, that he is a learned man.

A student, for example, who is just crossing the *pons asinorum*, may attend the Senior Mathematical Class, and get a certificate for doing so from Professor Jack. Yet of the subjects taught there he will not have the faintest notion. The same man may go on to enter the Natural Philosophy Class, where the faint glimmer which did heretofore illumine his path across the bridge will be extinguished in Chaos and Night. Yet this student, who has grown worse instead of better, will receive a certificate from Sir William Thomson, whose class about mid-session is well worth a visit from any reader of this pamphlet who wishes a practical illustration of the *ne plus ultra* of University methods.

In the Classical department, Latin does not lead to Greek, Greek does not lead to Latin, and Latin and Greek together lead nowhere. In both of these classes the work done by the present Professors is enormous, and as it happens that they are men of ability and energy, the very best result possible is attained. But how poor it is! They could not, though they tried, give their students a complete course of Classics. So impossible is it, that they cannot even *try* to do so. Their classes are not parts of one whole, but remain disconnected units.

In the Philosophical department this is even more the case. For here the two Philosophical classes are not only

distinct, but may be, and are at present, actually in opposition. In the Logic class one doctrine is taught; in the Moral Philosophy class a different and opposing doctrine. Orthodox Philosophy, which was once the pride of Scottish Universities, and was carefully graded so as to lead on the student by easy steps, no longer exists. It is not known what Philosophy is orthodox. One is as good as another, so Glasgow University gives as many as it can. Had it retained four Philosophy Chairs instead of two, we should merely have had two additional “champs de bataille,” and a still wider divergence from any organic union.

Along with these “Philosophy” Chairs is slumped the subjects of English Literature, which has as much connection with them as Glasgow Cathedral has with the Royal Exchange, or Civil Engineering with Greek.

The relation of one class to another, however, is even excelled in absurdity by the relation which the members of each class hold to one another. And we now come to consider this.

THE RAW MATERIALS UNDER MANUFACTURE.

"They gang in stirks, and come oot asses."

"Little English, less Latin, and no Greek."

IN former times, no one was admitted to the University till he had received all the learning that the Grammar Schools could give. The Grammar School course lasted five or six years, but even after it the pupil required to be examined before he could be admitted to the University. By this means the University maintained its position as the highest educational institution in the kingdom—as the summit and crown of all the schools. But how different now! For the last century the University has been plunging with accelerating speed down a headlong course, and is now in many respects, if not in all, inferior to many of the secondary schools throughout the country. It is no longer an educational seminary. It is a mere collection of heterogeneous individuals called students, with a set of mock teachers, called Professors, presiding over, but neither ruling nor teaching them. The only requisite of a student now is—not education, but money. The question asked

as he matriculates, is not—Do you know this or that? but Can you pay the fees? “Ho! ye that thirst, come, buy without money!” was addressed to other generations than ours. The cry now is—“Ho! ye that have money, come! You needn’t drink if you don’t like; but, if you pay, we will certify that you did drink.” Hence you may find in one class, and under one teacher, students at all stages of progress,—the only thing in which they are equal being the fees they have paid. It is just as if a school teacher gathered together into one class all sections of his school, boys of every standard from first to sixth, and taught them lessons suited to the fourth standard alone. The Protean method that would be suitable for such a heterogeneous class has not been discovered even by Professor Jebb, who is the nearest approach to a perfect teacher at present to be found at Gilmorehill. A teacher who attempted such a procedure in a school would be speedily dismissed. Yet this is exactly the state of things in the University classes which Professor Jebb defends.

“In the Humanity Class this year,” said Professor Ramsay in 1879, “are included joiners, miners, brass-founders, bootmakers, tailors, grocers, engineers, ship-builders, drapers, stewards of steamers, a toll-keeper, a pocketbook-maker, a blacksmith, with others.” Here certainly is a pretty list of scholars at our highest educational institution. But the joiners are not learning carpentry, nor the grocers trade, nor the bootmakers cobbling. They have a soul above such things. They

have broken away from them, and have, at the same time, made a huge and often irreparable rupture in their own lives. The joiner at his bench, the miner in the pit, the toll-keeper at his bar, has received a call, from on High, as he fancies, but more probably from his own conceit, fostered by some ignorant evangelist, or equally ignorant clergyman. This call was to become a minister, and he has come to the University as the only path to the ministry. He has no learning—can hardly spell his own name—cannot write three consecutive sentences without error—but what of that? He can pay the fees. The Professor of Humanity will be most happy to oblige him by going over his declensions, and the Professor of Greek by teaching him the alphabet!

How can we expect learning in such a University as this? What we may expect, and what we actually find, is the students' original conceit raised to the *nth* power, as we see it in the blatant orators of our third-rate pulpits. These men do not go to the University for the sake of learning. They already know the "way of salvation," which is the only knowledge they value. A wise ancestry appointed that the ministry should be filled by learned men, but these students evade the regulation, and the University is willing, for the sake of fees, to assist them in their course of hypocrisy. Instead of welcoming such men as its *alumni*, the University should say to them—"Go back to your work. You have been trained to it, and can probably do it. One form of labour is no less sacred than another,

and by your lives, even better than by your words, you may teach your fellows. You have not the training necessary for this form of work to which you aspire, and until you have it I cannot receive you. It would be false to you and to myself, and to the cause of learning for which I exist, were I to do so."

"If honest nature made you fools,

What sairs your grammars?

Ye'd better ta'en up spades and shools

Or knappin' hammers."

But the University will say this only when it looks upon money as secondary to education, and when the Professors cease to gloat over their fees as the prime end of their existence. It would be foolish to expect so much public spirit from them under the present regulations, which are framed so that every additional student, whether real or dummy, is an additional fee. For them the more dummies the better.

But all students are not dummies. There are a few who come to the University with education that would qualify them for a real University career, and there are a few who leave the University with qualifications that entitle them to be called educated men. Such students are the salt of the University, and keep it from palpably rotting in the sight of men. But can we form any idea of the amount of salt in the putrid mass?

(1.) How many enter College after a complete Grammar School course? It must not be supposed that a complete

course at a Grammar School is a guarantee of sufficient education. A boy may go through it all and yet be as uneducated as 'Tom Tulliver when he left the Reverend Mr. Stelling, and construed *nunc illas promite vires*, as "now promise those men." Nor must it be supposed that a lad may not fit himself for the University without the help of a Grammar School, merely by dint of inborn genius and industry. But the answer to the question we have put will be an approximation to what we want.

We may refer again to Professor Ramsay's statistics for 1879-80. His class numbered in that session 647, of whom 590 gave in returns, showing that 391 of this number were engaged in work extraneous to the University (240 all year through, 135 during the vacation only, and 16 during the session only), while the remaining 199 were free to devote their whole time to University studies. We may assume then that this 199, or a third of the students who enter College, come straight from school, and it will be an exceedingly liberal allowance if we grant that half of them have completed a school course. We may suppose then that about one in every six of those who enter the University are qualified to do so. In other words, five out of every six ought to be rejected; and instead of having about £1800 of fees, Professor Ramsay ought only to have about £300. He is plainly overpaid £1500 per year of five and a-half months.

(2.) How many leave College with qualifications that entitle them to be reckoned educated men? For the

answer to this question we may refer to the University Calendar, but here also must be content with an approximation.

Every student who can will take the M.A. degree, and we find that about a third of the students do so. But the M.A. degree is no proof of education. It indicates about the same level of education as that possessed by a boy leaving a good Grammar School, and is a miserable result from a University course.

We will more nearly find what we want in the Honours List, where, in order to be liberal to the University, we may include the second class men as well as the first class. What, then, is the result? Of about 300 who are completing their Arts course, about fifteen, or one in twenty, take Honours. While the University turns out about 300 men per annum, with the stamp and authority of learning, only fifteen—a poor five per cent.—have any right or title to the name. While one in every six begin their University course under favourable auspices, only one in every twenty complete it under the same. In other words, out of every fifty promising students who enter its walls, the University destroys, or at least loses, thirty-five. Whence comes this shameful result?

The immense majority of Scottish students come to the University with a serious intention, which, as a rule, preserves the older students, whose characters are already formed, from falling a snare to the allurements of the city. *They* are usually men who look forward to a sacred pro-

fession, and have a long leeway of knowledge to make up. When they have intelligence enough, and are not the mere nurslings of an effete and hysterical evangelism, they cannot fail to benefit by their years of solitary study. Unnoticed, unaided, unguided, they pursue a path which they toilsomely cut out for themselves, and rise by their own efforts to a respectable platform of learning. They are a credit to themselves, and to the country which produces such hardy sons. They can never become learned—*that* is effectually prevented by their University—but they supply the hard heads which still preserve our Scottish theology from the contempt of the world.

It is different, however, with the junior students, who come to the University usually with a better store of information, but with characters still unstable. For many of them the temptations of the city are too alluring, and from the absolute want of the discipline a University ought to give—from the neglect of individuals in the enormous classes where each student receives about half-an-hour's attention every five and a half months—from the ease with which they learn all that the University requires of them—from mere disgust at the futile pretences of the University in which they early discover that hypocrisy pays about as well as honest work,—and from many other causes, the University to which they are sent becomes their bane. While this accounts for the large majority of the seventy per cent. who fail to realise the promise of their school-days, there are a sturdy few who, despising the Honours

Degree, and forsaking the absurd old University path, are yet mounting towards knowledge with no guidance but that of their own resolute hearts.

Of the causes we have mentioned for this preposterous state of things, perhaps the most fundamental are the total absence of discipline, and the consequent neglect of the individual students. In former days, when the University was a reality and not a sham, the masters were the constant companions of their students. They even ate and slept with them; but, more important still, they were with them all day to discuss the questions with which they were all interested and occupied. A professorship then was no sinecure. But now the professor struts his brief hour upon his rostrum and is gone. The students as a rule never speak to him, but regard him as a demigod far raised above them, or avoid him with veiled contempt as a nobody pretending to be somebody. It is even considered a bold thing, and is most unusual for a student to stay after the class hour and question his professor on a knotty point. To such a degree has the professor become a mere lecturer and no teacher! As for friendly intercourse, it does not, and, in present circumstances, cannot exist. A smart man like Professor Ramsay very probably knows every student in his class by mark, but that is the most intimate knowledge he has, and most of his *confrères* are not smart enough even for that. One or two of the professors, at the end of the session, meet with the prize-men of their class, and so have one near

look at them. But how can a professor, with 300 or 400 students under him for five and a half months, have any familiar intercourse with them? Give him even the whole day, as regents once had, the time would be too short; but in one brief hour of rostrum-strutting it is utterly impossible. Hence the ruinous neglect of the students, which tells so much not only against their education, but against their character.

But it may be asked, how comes it that when placed in such adverse circumstances the Scottish student is able to learn anything at all? The answer is simply this: He is thrown into the society of his fellows, and into the study of books. "Among eleven hundred Christian youths," says Carlyle, "there will not be wanting some eleven eager to learn." They act and react upon each other, and form a mutual polish. But this influence is small in our Scottish Universities, where there is far too little association among the students. They seldom have more than a nodding acquaintance with each other. Their poverty prevents them from meeting one another at their lodgings, and at the University they remain together as short a time as possible. The chief educative influence is that of books, and, in their solitary studies, our students exhibit an energy and persistence probably unequalled by the students of any other country. It is this that forms the glory of the Scottish student. In spite of University obstacles, in spite of professorial neglect, in spite of insufficient elementary training, he often gains, though not

a high, yet a respectable place in the learned professions. But with what toil—at what expense and waste of effort? How many lives of our most promising youths have been and are sacrificed to this Juggernaut of University hebetude and professorial greed? And this Institution calls itself an *Alma Mater*!

But it may be asked why the students do not go elsewhere than the University for their education. They cannot do so on account of

THE UNIVERSITY MONOPOLY.

“Our Ancient Privileges.”

THIS is not a monopoly of learning. In our modern times learning cannot be monopolised by any institution. Books fly abroad to the ends of the earth, and carry with them all the learning of men. He who can read has already the possibility of learning. But the University monopolises the honours and titles of learning. It confers, for example, the title of M.A., and thereby announces to the world that the possessor is a learned man, and has its authority to call himself so. Our Presbyterian Churches also require the students who enter their divinity halls to produce proofs of learning from the University, though they do not require them to possess the Degree.

This is the monopoly possessed by the University—the monopoly of teaching and crowning with honours all who wish a learned title, and who aim at entering what is called a learned profession. Those who possess the title of M.A., and those who are members of a “learned profession,” need not be learned men, but they need to possess University certificates. Study as you please, become as learned as Scaliger, and as profound as Newton, this

University will not recognise your claims unless you submit to waste your time and money in the peculiar way she bids.

Having thus a monopoly of teaching, and of the power to confer honours, it might be expected that the University would be careful both about its teachers and about its taught—to see that the former are able for their work, and the latter entitled to the honours. Is it so?

A professor is appointed for life. It is not known till after his appointment what kind of teacher he will turn out, yet there is no time of probation during which his appointment may be confirmed or cancelled. Good, bad, or indifferent, he is there, and will remain for life monopolising the fees attached to his particular subject, though his inability to teach it may be conspicuous to the whole world, and probably to himself as well. It often happens that his teaching has to be made up for by some abler man outside the College, so that the students have to pay double fees—one fee to the incompetent professor, who has a name to live and is dead, and one to the competent outsider. But most students are too poor to pay a double fee, so they have to be content with a University certificate, which means that they have sat for so many hours under a man who is unable to teach them—a certificate not of learning, but of wasted time and money, and of hypocrisy as well.

In former times, when a University still aimed at the advance of learning, it was not unusual for men who had not studied at the University, but who thought themselves

sufficiently advanced, to ask to be examined by the University, and to receive the Degree when found fit. But now, when the means of learning outside of the University are multiplied far beyond what they ever were before, such a way of obtaining the Degree is quite closed. It would be a sure way of depriving an incompetent professor of his fees; and the University must of course support its own professors, the incompetent as well as the competent.

One can hardly conceive an arrangement more suited than this to crush learning in a country. The institution which alone has the power of granting Degrees is also that which alone is allowed to educate those who aspire to those Degrees. It recognises no educational institution in the country but itself. While the teaching at the University may be, and frequently is, of the very worst kind, every aspirant to a Degree has to submit to it, although at the very door of the University may be situated another institution where the teaching is of the very best. The good teacher is despised and neglected; the incompetent one, while he may earn the contempt of his students, which cannot hurt him, receives at least their fees, which may haply benefit him.

Though it is scandalous that the University should be in competition with the secondary schools, which should be its feeders and not its competitors, the University authorities sometimes make a boast of the cheapness of the education it gives. It is both cheap and nasty. Any secondary school would be ashamed to give such an

education ; but, in order to give a better, it has to charge higher fees. In proportion to the education given, however, there is no secondary school in the country that charges so enormously as the University. A class at a good secondary school will number, at the very most, about 40 ; a class at the University numbers, on an average, about 250. Hence to bring his income to anything like equality, the teacher at a secondary school ought to charge about six times the University fee, that is, eighteen guineas per half year, or thirty-six guineas per annum for each class !

In the High School of Glasgow the highest Form pays £14 per annum for Greek, Latin, English, French, German, and Mathematics, or for English, French, German, Mathematics, Drawing, and Science. Charged even at the University rate of three guineas per class, without considering the number in each class, the High School should charge at least eighteen guineas per half year, or thirty-six guineas per year, for either set of six subjects.

In reality, therefore, the University is by far more expensive than a secondary school. But how much cheaper does it seem ? It gives a complete course of highly honoured education for about £36, while the High School of Glasgow cannot give a complete course of even lightly esteemed education under £70. University *honours* are cheap ; High School *education* is double their price.

In the race of teaching, then, the secondary schools have not only to fight against the University monopoly, but against the University cheapness. The University poaches

upon them both with the M.A. gun and the three-guinea snare. How can it be expected that they can have anything but a flickering existence? That they live at all in spite of the University opposition, is due to the fact that there are men who prefer education to a Degree—who love the reality as distinguished from the show of learning, and to this other fact, that there is here and there a teacher who loves his work, and is willing to spend his life in comparatively unremunerated labour.

PAYMENT OF PROFESSORS.

“A pound of flesh”—yet—“’tis not in the bond.”

WE have had occasion, several times, to mention the subject of fees, and must now shortly consider some facts about University finance, which we will find, unfortunately, as absurd, unjust, and hurtful to the cause of education as anything we have yet considered.

But, first of all, let us hear Sir William Hamilton on the subject of fees.

“When the custom of giving salaries to certain graduates
“—*i.e.*, of endowing certain chairs—was introduced, *no fee*
“*could be legally demanded*: the endowment was in lieu of
“the fee—a boon to the public and the poor; and it was
“only after these salaried graduates, who in time came to
“be called *Professors*, had, by their gratuitous instruction,
“rendered the lectures of the graduates at large a profitless
“vocation—I say it was only when other lectures were
“discontinued, competition thus removed, and the whole
“instruction, and often even the whole regulation of the
“University allowed to fall into their hands that, by slow and
“imperceptible degrees, fees were again introduced, and in
“different schools and countries, by different means—some-

“times legally, more frequently illegally—raised to the footing
“of compulsory exactions. The records of the University
“of Glasgow show the progress of the innovation in that
“institution. In the earlier ages, and when the salaried
“graduates—the regents of the *pædagogium*—were very
“inadequately provided for, honoraria or voluntary offerings
“by the richer students were naturally made. These
“gradually became customary ; were in time looked upon as
“a due, and, by sanction of the moderators (not professors),
“a graduated scale was from time to time fixed, according
“to which students of different ranks were expected to
“contribute. The poorer scholars were always declared
“free ; and those educated for the church being generally
“of that description, no custom of honoraries was ever
“introduced into the Theological Classes. The City of
“Glasgow had been a considerable benefactor of the College ;
“and the Corporation, till a late period, took care that its
“citizens should enjoy their original privilege of gratuitous
“instruction, or at least pay only such fees as they them-
“selves deemed reasonable ; for at every new regulation
“touching ‘*scollages*’ or ‘*honoraries*,’ it is stated either
“that the children of the citizens shall be entitled to
“gratuitous education, or that they shall be liable in pay-
“ment only ‘in such proportions and rates as the Town
“Council and Moderators, after conference, shall agree upon.’
“At length, since the commencement of the present century,
“the professors seem to have taken upon themselves to
“double and treble the previous rate of fees without the

“sanction of the moderators, far less the consent of the city. . . . If the City of Glasgow should vindicate its right of control, this might be exerted not merely as a salutary check upon the irregular imposition of fees, but indirectly be employed as a means of raising the character of the University itself, by extorting a reform in the present mode of its academical patronage.”

This was written about forty years ago, and “the irregular imposition of fees,” of which Sir W. Hamilton speaks so indignantly, has been carried out to an even greater extent since then. Even as late as 1874 there was an increase made in the fee for the Theological Classes. The imposition of fees is illegal; but as most men like to pay for what they get, the illegality has been allowed to drop out of sight. It may be illegal, but it is not an injustice to pay a fee; the injustice begins when you require to pay a fee for a lie, as the majority of our students do.

The fees were originally gratuities to the professors, and hence the custom which still survives of paying them not to the University, but to the individual professors. They were gratuities, moreover, which varied, as all real gratuities do, with the power and wishes of the giver, and had at times even to be ordered *not* to exceed a certain sum—the gratitude of the student being in danger of going beyond the proper bounds. Sometimes, as Sir William Hamilton says, the honoraries were fixed by moderators, but at other times they were fixed by committees of the students themselves, who were supposed to know each

other's circumstances best, and were therefore allowed to "stent" themselves. As soon as they ceased to be a voluntary gift, and became a regular charge upon the students, they ought to have been paid no longer to the individual professors, but into the University exchequer. To the continuance of the former plan may be traced most of the evils that beset our University Education. Greed and selfishness are at the bottom of them all.

Formerly the fees (gratuities) were a small and uncertain addition to the endowment of the chair, but they now form the great proportion of the professor's salary, and they are as certain as the endowment itself—the only uncertainty being as to how much this year will be more than the last. Hence the inducement is to increase the amount of fees by increasing the size of the classes as much as possible. Accordingly the classes have become so large that the classrooms can hardly contain them, and such that each student can receive only a few minutes' attention from his professor, not every day, not every week, but every year!

Were the Professor paid a fixed salary he would have some inducement to keep his class within his power of grasp, and when it got too large to seek the appointment of another teacher or teachers to take the surplus. In this way the staff of teachers, which is so abominably small, would have been sure to increase. But now the professor is distinctly bribed to preserve his monopoly unbroken. It is undoubtedly due to this cause that subjects of study, which have long ago attained importance, have been ex-

cluded from the course. Had they been introduced the fees would have been distributed among a larger number of professors, and there would have been less to each.

The University has thus become, instead of a place of education, a mere mine of money for seven lucky men, who are now in terror lest their luck is about to forsake them. It is a mine, too, which can be worked in a certain manner. Thus it is a very good thing for a professor if he can get his subject spread over two years, as by so doing he will nearly double his fees. The Professor of Greek has even a three years' course, and begins his lowest class with the alphabet, so interested is he in crushing the opposition of the Secondary Schools! The Professor of Latin, however, is not far behind him. The Roman so nearly coincides with the English alphabet that he hardly requires to teach it, but he begins as near it as possible with nouns of the first declension! And in such a race for fees the Professor of Mathematics, with his three classes, is sure to run neck and neck with the others. Accordingly, "as a matter of historical fact," the Junior Mathematics begins with the veriest A B C of Algebra and Euclid. A student in a University is asked to define a straight line!

The proper way also, when a professor has two or three sets of classes, is to appoint an assistant to take charge of one of them. His fees from the class will be about £600, and he will pay the assistant perhaps £200, thus leaving himself £400 for doing nothing except signing the certificates, which would hardly be valid with only an

assistant's signature. Really there is nothing like an Arts Professorship for making money! And the assistant may be even a worse teacher than the professor!

Some conception of the amount of money thus lost to the cause of education may be formed by a simple calculation.

During the last ten years the seven professors have received in endowment and fees, £107,755 (of which the fees amounted to £87,864). Had their salaries been fixed at a certain sum, say £600 per annum, which is the amount the University itself has fixed as the proper one, there would have been left in the University Exchequer, after payment of their salaries, a balance of £65,755. During the past ten years, therefore, the University, by its unbusiness-like and unjust financial regulations, has lost £65,755.

What could it have done with this? It might have supported eleven more professors at £600 per annum each, or twenty-six sub-professors at £250 per annum each; either of which salaries, it must be remembered, is for about five and a-half months' work. Or if the University preferred a slower but more thorough method of extending its operations, it might have founded four professorships, with endowments of £600 per annum each. Or in many other ways it might have furthered the cause of education in our country, where it is so much needed. But no! £65,755 have, within the last ten years, been quietly, and, no doubt, joyously, pocketed by seven men in addition to their proper salaries.

We need not ask where the major part of this money

came from. What economies in poor Scottish households, what anxieties in the hearts of fathers and mothers, what semi-starvation on the part of students, it has cost! Anyone who knows the Scottish student knows all that already, and even our professors know it, though the knowledge does not make them pause in their career of extortion. And to think for what little good, or rather for how much evil, all this money, all this labour and anxiety and economy, is spent; It is a disgrace to the University and to the Professors, and would be a disgrace to Scotland if it knew and permitted such a state of things to exist.

If we could think of the University as distinct from the professors, we might even exclaim: "How foolish of it to give all this money to its officials and itself so poor!" For it is a poor University, making humble petitions for aid from Government, crying out for help from far and near, and intriguing, it is said, with aged millionaires for a share in their bequests. Poor, yet making many rich—that is, making seven rich! Such a poverty is hardly less criminal than the professorial wealth, of which it is merely the obverse side. Far from deserving pity, it deserves merely indignation and contempt.

S U M M A R Y.

*"I backward cast my e'e
On prospects drear."*

LOOKED at from any point of view—from that of students, from that of teachers, from that of the country at large—the University is at present doing an evil work, injurious to the body and soul of its students, injurious equally to its teachers, whatever weight and importance it may add to their purse and person, and injurious, well-nigh fatal, to the progress of the country in all that a University is designed to promote.

Here are a few of the modes in which we see the evil operate:—

(1) By its monopoly of the course for the degree, it is untrue to its own traditions, and inflicts an injustice on every able teacher in Scotland.

(2) By confining the Arts course to seven subjects, it offers a direct obstacle to the advance of learning. It has, indeed, ceased to exist for the cause of learning—the main end of its existence being merely the enrichment of seven individuals.

(3) By admitting students at all stages, or at no stage of advancement, it hinders the progress even of those who are well prepared, and injures the culture of the whole country by supplying the professions, and especially the Christian Ministry, with ignorant men.

(4) By permitting classes of unlimited size it completes the worthlessness of its teaching, and makes a University Chair a money prize instead of an educational force.

(5) Its professors, while chosen for life, are not chosen on any rational principle, and are frequently unfit for their duties. In some instances they have ruined the teaching in their departments for a lifetime.

(6) By teaching merely elementary subjects it enters into a scandalous competition with the secondary schools, and lowers the standard of education throughout the country.

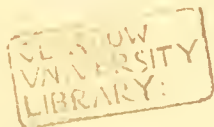
(7) It injures the secondary schools throughout the country by ignoring teachers who are often abler than its professors, by forcing students to attend professors who cannot teach, and classes whose size incapacitates even those who can, and by enticing scholars away from the schools to an ostensibly cheap, but really expensive and worthless education, by the bribe of honours and certificates.

(8) By maintaining an antiquated system of teaching, it inflicts on its students much serious injury, both of body and of mind, and on its professors—willing victims!—a profitless expenditure of time, while it still further aggravates the injury it is in other ways doing to the cause of culture in Scotland.

Combine with all these the subtle venom of shams—sham teaching, sham honours, sham certificates, sham respect—and the illimitable growth of hypocrisy that goes on alongside of them, and you have a sum total of evil that is hardly to be equalled in any institution under the sun. It would be utterly impossible for such an institution to start thus equipped into existence. It continues to exist because the mists of antiquity give a soft outline to its criminality—because its shams were once truths, and still gull the public by the semblance and flavour of reality, and because men are disinclined to change, and, from sheer indolence, shrink from the labours of reform.

But the evil has now become too gigantic for endurance. It is yearly making immense strides. Not here and there, but all through to the very core, there is necessity for great and immediate change.

What form shall it take?



University Pamphlets.

II.—PERSONAL EXPERIENCES.

BY M. A.

Glasgow:
ROBERT L. HOLMES,
3 AND 5 DUNLOP STREET,
1882.

HORN & CONNELL,
PRINTERS,
11 DUNLOP STREET, GLASGOW.



PREFACE.

IN the only notice of my first pamphlet which I have seen, the critic seems to have considered it scarcely worth serious study, thinking it, no doubt, merely a rash and wanton product of "irresponsible frivolity." Possibly, however, before this series of pamphlets is concluded, he and others may discover that it has been entered upon with a very serious and deliberate purpose.

He ends his notice with an intended condemnation—"The violence of the onslaught will go far to neutralise its effect." The condemnation is in reality a compliment. He means that the public, who are invited to read these pamphlets, will not believe what I say about Glasgow University. In other words, the actual condition of Glasgow University is *incredibly* bad, and its continuance in that condition is possible only because the Scottish people are ignorant of it, and have been hitherto in the habit of regarding the University with unquestioning reverence.

Those who know the University know that "Actuals" is a statement of facts, and their objections to the pamphlet, so far as they have come to my ears, are not to the facts contained in it, but to the theoretical and so far questionable points raised in it, such as the exclusion

of technical studies from the University, the condemnation of lectures as a mode of teaching, &c., and to the apparently angry and bitter spirit in which I have referred to the Professors. They also, like the critic in the *Glasgow Herald*, have pointed to £600 as insufficient remuneration for a Professor.

Now, to take the last point first, it was not "Medicus," but Glasgow University itself, that so lately as this very year fixed £600 as the proper salary for an Arts Professor. I have no opinion on the subject. I only see that you offer sufficient money inducement to secure a first-rate scholar—say a Professor Jebb—and what is the work you set him to? The teaching of the Greek alphabet and the correction of elementary exercises! It is as if you set your highly-trained civil engineer to the work of a navvy! What a waste of energy! What a waste of culture, like the sowing of rich arable land with dockweeds! Yet for the sake of a salary—whether £2000 or £20,000 does not in the least matter—Professor Jebb is not ashamed to stoop to work like this. A sufficient salary, in the true sense, is one that enables a man to do his work in the world; but I remember that to modern greed no salary, however large, is considered sufficient so long as it is capable of increase. It is to exclude this spirit of greed from a sphere in which it is only a usurper that I call upon the University to fix the salaries of its Professors. The figure at which they ought to be fixed is quite a secondary matter.

As to the individual Professors, I have no doubt they are all "honourable men." I have no personal acquaintance with any of them, but from others I learn that some of them are amiable as well as energetic, anxious to do what good they can to the students under their care. They are victims of an evil system, and so far are more sinned against than sinning. But the same might have been said of any previous set of Professors, and yet the historical result of the succession of these amiable men is the rampant evil that we see,—an evil which is more directly traceable to professorial greed than to any other cause. Each successive generation of Professors has found it its pecuniary interest to continue and promote the evil system, and selfishness has in the long run proved itself victorious over their amiable desire for the students' welfare. Does the present generation seem less anxious than its predecessors to maintain this evil system? I have no desire to wrong them, and but for a strong sense of duty would never even have said what I have said about them. To such a disagreeable subject as this I trust there will be no necessity to return.

"Lectures are not a method of teaching at all." This statement, put in the abrupt form I adopted, seems to have carried at once into readers' minds the inference, "therefore lectures should be abolished from the University." But here a historical fact will throw light on what I mean. I have said "prelections were delivered in the morning, and the students were again and again

examined upon them during the day." These prelections formed, as it were—in the want of the printing press—the text-books for the students' study; and when text-books became possible, the University, in its less degenerate time, proposed the abolition of class prelections. And this abolition ought long ago to have been carried out for the reasons already abundantly given in "Actuals." But, in addition to the class prelections, there were public lectures open to all the students—independent of the class-work and supplementary to it. The only representative of such lectures in our time is the recently instituted address by the Principal at the beginning of each session. On this lecture there is no examination, and the students are not required to undergo the drudgery of note-taking. Such lectures as this ought by all means to be continued. A man may have something to say which is worth saying, and yet is not in a form he would care to print. Let him say it, and let it be open to the students to hear, but do not require of them that drudgery which prevents them from ever receiving the full benefit of the lecture. In a University, as in the world, the best influence is the personal influence of thoroughly cultured men—the best learning is spiritual, and gained by contact with superior minds. Do not destroy this personal—this spiritual influence by the mechanical toil of note-taking, or even by the apprehensive terror of future examinations.

But I am anticipating a future pamphlet, and must go no farther. For the same reason, I say nothing at present

of the other point of difference with my friendly critics.

Commissions have been again and again appointed to inquire into the condition of our Universities, but their results do not usually reach the public, and the reforms that have till now been founded upon them, having been left mainly to the Universities themselves, have not been of a sufficiently drastic character. The present Government is expected to send out next year an executive commission, which, it is hoped, will take University Reform into its own hands and thoroughly purge out the abuses that exist. That its work may be understood, and may carry with it the public sympathy, the condition of the University must be publicly known. In "Actuals" an attempt was made to generalise this condition, and to point out a few of its evil results, but a more detailed description is required. With a view to this I have myself held a Commission of Inquiry, and in the present pamphlet the public has the first instalment of the evidence laid before it. I need hardly say—for truthfulness is written on its very face—that the witnesses have given impartial and unbiassed evidence. They have been allowed to speak for themselves, and have neither been overawed by a bench of Commissioners nor blinded by self-interest.

The Editor is responsible for the few notes that are to be found here and there at the foot of the page.

MEDICUS.

December, 1882.

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FIRST LETTER.

MY DEAR ———

ON beginning a first letter regarding my experiences of the University of Glasgow, I feel somewhat sorry that I have not a few notes beside me as a basis to work upon. I know that many things which impressed me during my first session are now quite beyond my powers of recal. I know, too, that at that time I was in a much better position to compare and judge than I am now. The old fashioned ways of the University, however absurd they appear when you first enter upon them, appear less ridiculous and intolerable after four years acquaintance with them. Just as the ear loses its acuteness of sensation when long exposed to loud noises, and the hand its acuteness of touch when roughly used, so the sense of absurdity becomes dulled when the absurd is the sphere of your daily walk and conversation. But what I can recollect, I shall put to paper.

To begin, then, I was very glad that none of my acquaintances saw me wending my way University-wards on a foggy morning of November, 187—, to be present at the first meeting of the Junior Humanity Class. Not that I was ashamed of being known as a “Civis Universitatis Glasguensis,” but I felt that there was something extremely silly

in being forced to wear a red gown, proclaiming to everybody what I was, and thus making broad my phylacteries, like the Pharisees of old.* How that gown was insisted upon by the *doctissimus* Professor of Latin! For two consecutive sessions I heard almost every morning such queries as—"Where is your gown this morning, Mr. —?" with resulting answers of a palpably embarrassed type. The fact is, a considerable number of the younger men, and almost all the older, cordially hated the scarlet embellishment, and took every opportunity of discarding it. Many of us were glad to find that it was insisted upon only in the Humanity Classes.

Well, on that eventful foggy morning, about 8 o'clock, I found myself seated with about 300 others in a dimly-lighted class-room. The three hundred were of all sorts and sizes: there were boys of 14 and men of 50, "lads" of high degree, and young men of low, with a goodly sprinkling of grown-up men, whose appearance shewed a thorough acquaintance with manual labour, and a thorough ignorance of study. After a prayer of the most approved Anglican type—uttered by the Professor with eyes open—we heard a 45 minutes' address on the value of education, chiefly of that afforded by Universities in general, and by the

* The gown had originally a meaning like other survivals from ancient times. When the University was a Corporation independent of, and even as it might happen, opposed to the Town, the red cloak secured its wearer against the jurisdiction of the Civic authorities. If a student committed a crime, he was tried for it by his University. On the other hand, the cloak might, in a riot, for example, more easily procure the detection of its wearer.

University of Glasgow in particular. The lecturer warned us especially against "vulgar and material pursuits." There were many bits of good advice in the speech, all of which were duly appreciated; but no passage in it was more appreciated than an anecdote of a German Professor. The latter was pointed out as a man of prodigious learning:—"That man, Sir, has made himself a name that shall go resounding through the centuries,—that man, Sir, more than any man of present or past times, has studied—mastered completely—all about Bugs!" "Gentlemen," said Professor Ramsay, "beware of specialism." Of course such a story again called forth the usual pedal approbation, which, but a few minutes previously, had been characterised as ungentlemanly and absurd. This time the scene was truly dramatic. "Gentlemen," entreated Professor R., leaning over his desk and stretching out both arms, "have respect for those walls. Remember the institution with which it is your privilege to be connected." The exaltation of the walls was scarcely *à propos*, except as the creation of Sir Gilbert Scott, and the enclosure of a somewhat badly ventilated apartment; but the exhortation, as a whole, formed a nice little episode in the general epic.

How different from all this was the meeting at 12 in the Junior Greek! On entering the room, one felt it to be quite dreary in comparison with the oak-panelled, warm-coloured walls of the Humanity. Nought here on the white-washed plaster,—no clock, no ancient Blackstone *sella*, no beautifully-carved platform, with chairs to match,—

nothing but a meagre pine rostrum, with a kitchen-looking *fauteuil* in its centre, and a solitary map of Greece by way of background.

We were kept only seven or eight minutes. "Gentlemen," said Jebb, "I welcome you all to the Junior Greek Class,"—pedal interruption, silenced at once by the uplifted right arm and a peculiar glance around the room—"and I am sure that no effort will be wanting either on my part or on that of my friend Mr. M—to promote your efficiency. Mr. M— will take the class every day of the week, save Monday, when I shall lecture on Philology. For to-morrow morning you shall prepare . . . in Curtius' Grammar, and for next Monday . . . of Peile's Primer. I wish you all good morning." So the work in Greek had started. I had noted "his absolute shall," and, ere many weeks, had seen that Jebb meant his work to be prepared, and well prepared too. But of this more anon. I must tell you about the enrolling, since I have alluded to it.

I had thought, before coming up, that all payments must be made to some clerk or treasurer of the institution, but on reaching the Senate Office I learned that the clerk took only the matriculation fee, and that the respective Professors were lying in wait in their class-rooms, each for his three guineas.* There was a great crowd in the Senate Office, and more than half-an-hour elapsed before I was permitted to give up my pound and get the equivalent piece of card-

* This, of course, takes place at the beginning of every Session.

heard. Just imagine a customer of a commercial house treated in that fashion : in many cases it would result in the discharge of the servant, but in this case the fault was not entirely his, for there should have been more servants on duty. Not entirely his, but still he shared the blame. He went about his work in a remarkably easy, pre-railway, four-mile-an-hour fashion, which sorely tried the patience of those waiting, and which, had he been an official, say of the Cunard Company, would inevitably have secured his discharge on a very early date. After matriculating, two or three of us went to the Humanity Class-room where, along with one of his assistants, Professor R. sat at the receipt of custom. There were a dozen or so in the apartment, for whose convenience forms were provided, and from each of whom many particulars were educed as to name, age, school or schools attended, how long in these, and several other questions. There was present among the rest a well-known Glasgow gentleman with his son, between whom and the *doctissimus* Professor a perfect cannonade of salutations took place, the citizen on retiring going backwards to the door, bowing at every few steps in the most approved Court fashion, while at every coxallexion the Latinist lowered his spine in response to a slope of about 36° with the horizon. But, joking apart, there is a refinement in Professor R. which one likes and feels to be the property of a gentleman: and later in the same, and succeeding sessions, I found in him an amount of "heart," and a genuine desire for the students' welfare that is not shewn by every Professor.

In the Greek Class-room* the process of enrolment was in exact proportion to the length of the subsequent introductory address, which I have already described. With a cheery "good morning," Jebb hands you a printed form, requesting you to fill in your name and the class required: on giving it up you get the ticket of attendance, which tells you at once the bench you must occupy in the class-room. With a "thank you" for the money and a bow, all is over. I formed a good opinion of Jebb's power of conducting business—an opinion that has gradually strengthened since. A humorous *civis* said to me that if Jebb were enrolled as a booking clerk at one of our railway stations he would not only be a master of his work at the end of a week, but before three months would get an advance of 5s. in token of his abilities. This capacity for administration showed itself in many ways, particularly in the arrangements for the written examinations. Early in the month of November, Jebb had a printed ticket up outside his class-room, giving the dates of examinations for each of his three classes, place—always in the Examination Hall, where each man has a table to himself and all comfortable,—and time both of meeting and close. How pleasant this is to the student! So different from having it intimated, as I have heard, that an examination will take place this day week, and two days before to be told that the Hall is unfortunately engaged, and that we shall meet in the class-room. In the class-room, where we are "cheek by

* In my time the fees were *lifted* in the Professors' private houses—small and dingy as they then were—and it was a standing joke that So and So had heard the Professor's wife asking him to hold the baby!

jowl" with each other, writing with ink on oaken strips of six or seven inches wide !

The inaugural address in Humanity took place on a Thursday, as far as I recollect, the preliminary examination happened the following day, and on Tuesday we heard the judgment that was to separate the sheep from the goats. By the sheep I mean, of course, those who *passed* the paper of which you will find a specimen in the Calendar : the goats are those who did not pass, and were consequently sent to "another place," to start "*penna, piennae*," under the second assistant. I did not know that gentleman as a Latin teacher: once or twice he took the Junior Greek, and then showed much capacity for keeping his men under control. What the goats were as to attainments you already know. From time to time during the session we heard of Ramsay being in giving them, as one put it to me, "an awfu' through-pittin'," or of a *civis* who rendered a small piece of English into Latin by trying to put down the Latin equivalent regardless of syntax and declension! How they did it, I cannot guess. If you knew the assistant, I am sure he could give you some amusing stories of them. By the way, I am informed that it was he who wrote a couple of articles in the *Herald** about three years ago in which there were several amusing anecdotes regarding academical stupidity. I daresay you recollect the one about the student who carefully transcribed "demonian tye"!! Some of the goats must have been very

* My correspondent no doubt refers to two excellent articles—*Glasgow Herald*, Sept. 20th and 23rd, 1879—of which I am very sorry I do not know the writer.

bad. X. told me how horrified he was when H.—a goat—said to him, “A’m no pittin’ musel’ muckle aboot about the “examinashun; A’ll jist tak’ the key up wi’ me, an’ dae the “best I can”!! X. said he had some difficulty in making him understand that such a thing would not be permitted.

After we got the results of the “preliminary,” we had a great deal of marching about in the class-room for about two days, before we got into position, *i.e.*, each into his own place on the benches. Indeed, at least a week from the introductory address was lost before a lesson was given out, and since then I have over and over again heard students say, “Oh, it takes Ramsay a fortnight to get into working order.” How different all this from Jebb’s business-like way. Of course, he has no entrance exam., but still there are methods whereby Professor R. could save a good deal of time.

We read Ovid in the eleven o’clock class that session. I often asked myself why so much attention was given to that poet, for the fact that he inculcated notions of morality which should be unknown to boys of fourteen is sufficient for his exclusion from such a class. It was somewhat painful to hear so young a boy reading such a passage aloud before his fellow-students: and I am informed that there is yet no sign of substituting another author.* It was while reading the exiled poet that many of us got our first lessons in scansion. These, I remember, did not begin till about the

* Nor is it the least likely that another author will be substituted. My correspondent is not by any means the first who has felt Ovid to be unreadable in a class, but Classical teachers have reasons for reading him which they think sufficient to outweigh his immoral influence.

middle of December, but after that, strict quantity was insisted upon. The assistant took great pains with us, not only in this, but in everything else, and though some said that he was a bore, and others that he was a dreadfully dull teacher, yet I thought him a most earnest, painstaking man, anxious to get through a great deal of work in a thorough way. I suspect that the dislike to him arose partly through his reading 30 or 40 lines against Ramsay's 10 or 12. But though the latter read so few lines, he was no doubt the better teacher of a young student, for what he said about the lesson was delivered with a spirit and vivacity which the assistant could not command. Besides, Ramsay never lost an opportunity of making a joke,—illuminating thus the dreariness of the lesson, and securing to himself a good deal of popularity. One morning a raw-looking fellow from the Highlands had stumbled over the word "relics." "Pray, 'sir,'" said Ramsay, "what do you understand by 'relics'?" "Pair of old trousers?" Then the comical expression of face he assumed when a student gave a false quantity; not only the face, indeed, but his whole body was disturbed, and he writhed about on the platform as if at least a dog had bitten him. We were always glad when one or more proper names occurred in the work for the day—it was a sure sign that there would be no study required for the next lesson. If, for example, the student happened to mention Thrasymentus, he was at once interrupted by—"Yes, Thrasymentus. When 'I was there in the year ——'" and then followed a most interesting description of the famous lake, and one, it must

be confessed, more likely to be remembered by the junior students than if given by the assistant. Ramsay was most vivid in description. Thus, talking of the battle of Mylae—Mylae, I think it was—he said, “The Roman Admiral “sailed out, collared the Carthaginian fleet, and nabbed “them—every one.” The quotation may not be quite correct, and, indeed, the facts of history are otherwise, but “collared” and “nabbed” were certainly used, to the intense amusement of the whole class. Some fellows, of course, translated very poorly. One morning a native of a locality evidently about 60° N. lat., had a passage treating of dogs and horses. “Oh, sir, give us it as ‘Bell’s Life’ “would put it,” was the exhortation, which, still further confusing the poor man, led to his being unceremoniously “put down.” So you see R. was at great pains to secure thoroughly idiomatic language. “Oh, sir, better English,” was a habitual injunction; and if it were not forthcoming, there would then be a hunt over the whole class for the “well undefiled.” “A to C,” “T to Z,” “I to 13,” &c., &c., over the benches, on the “going, going—gone” principle and method, until the desired equivalent was obtained. Sometimes during a prelection R. would notice a slight commotion in a remote corner, hardly, one would think, within the range of his eyes. Suddenly he would stop, wheel round, and ask, “Pray, sir, is there a joke? If so, “we shall be delighted to hear it.” Of course the *civis* thus addressed immediately subsided. Once John D——, who was a rather heavy-looking fellow, showed signs of drowsi-

ness, dispelled at once by the query, "Pray, Mr. D—— "would you like a nap this morning?" There was a tradition in the class that, two sessions before, a six-foot man had essayed a verse of Horace, emitting nothing, however, but two or three preliminary grunts. "Do you find it difficult, "Mr. ——?" "Ah, it's geyan stiff," was the response, which of course sent the occupants of the benches into uncontrollable fits of laughter. In my session of the Junior an amusing scene took place one day. A dreadfully dull-looking fellow of about 38 was up trying to translate a small piece of Livy. It was in "*oratio obliqua*," as far as I remember, and Ramsay tried in vain to point this out to him. "It is in the *oratio obliqua*, Mr. ——," said R., with his usual politeness. No response. The very accent of good English seemed to trouble the would-be scholar, and though he had grasped that, I firmly believe the grammatical term was beyond him. Again the Professor, leaning over his desk, said with a slight smile, "It is the *oratio obliqua*, sir;" but again there was the same stony, open-mouthed silence. Ramsay now seemed about to turn to another student, when, as a last chance, he suggested, "Begin with *se*, if you please." Then, and not till then, the silence was broken. Scarcely was "if you please" out of the Professor's mouth, when a sudden spasm of apprehension seemed to seize the pupil, a preliminary flash of joy irradiated his rural countenance, and, with a loud, breath-laden, broad Scotch "Ou ay," he settled down to work. It was too much,—Professor, students, all absolutely roared with delight.

You will remember, I daresay, an article on the teaching of Latin which appeared in "Macmillan" between two and three years ago. It was by Professor Ramsay, and in it he urges the cultivation of a good prose style, beginning such cultivation at a very early period in the pupil's career. The opinions thus set forth were put in practice in his class-room. He insisted upon prose-writing every morning save Monday by all the members, and to this steady practice I ascribe, in great part, the rapid progress of several students. The secret of advance in acquiring a language consists greatly, I am convinced, in this daily translating from English, beginning, like Ramsay, with easy sentences of a few words each, and leading on to continuous pieces. It was a good plan of Professor Ramsay to require the prose written for—say Tuesday—to be re-written for Wednesday: in this way the teacher's corrections and remarks were remembered. He usually asked the exercises of four or five benches, taking up three or four students in each bench, and comparing their translations of the same passage. To this method some objected. They urged that you never got Ramsay's equivalent, that he would say, "Very good, Mr—," "but on the whole I prefer that of Mr—," and that he might possibly tack on a third translation as acceptable, leaving no time, so rapidly did he proceed, to take down any one of the three. There is a good deal of truth in these objections. I myself thought it would be a good thing for us if he posted up the Latin outside the class-room, as Jebb did the Greek. But the re-writing for next day helped one to

overcome this drawback very considerably, and, towards the end of the session, I, for my part, positively enjoyed the translation of a piece of English prose.

I have already mentioned the first assistant, who, for the most part, had the direction of the eleven o'clock class. His patience during the first few weeks was marvellous, and I often wondered if he ever consoled himself with "*Tantæ molis erat Romanam condere gentem*" as he strove to teach the dull portion of his class the first principles of verse. Just imagine him, with all his power as a scholar, waiting quite a minute till some slow coach made up his mind as to whether he should say "dactyl" or "spondee." Ultimately, S. found that he must get through a little more work, and then we often heard, "Really Mr——, I must call 'some one else, — we must get on,'" or "O really, Mr——, 'after explaining this so often, I expect better answers. I 'must call some one else.'" For my part, I felt very much for S.; the patience of Job himself could hardly have resisted those repeated shocks. One day far on in the session, M—— could not scan a hexameter line. After giving him a more than fair length of time, during which M. clearly showed that all previous instruction regarding the hexameter had been thrown away on him, S. said, "O, we must get on; 'I'll call some one else. But if you wait, Mr. M——, at the 'end of the hour, I'll be glad to go over the first rules of 'scansion with you." I observed, however, that he did not wait, nor, in fact, was he seen again at the eleven o'clock hour. Somebody told me afterwards that, considering him-

self aggrieved and insulted by the conduct of the assistant, he had resolved to attend at eight a.m. only. So M. evidently thought that he had a dignity to maintain, a self to glorify.

S. was always ready and willing to answer any question that might be put to him at the close of the hour, and though to the less anxious student he seemed prosy and dull, yet he showed delight at any such manifestation of interest in the subject. I remember that one day he asked us to remain at the close of the lesson, that he might exhibit some photos. of MSS. which he had procured for our information. I was one of those who remained, and was much struck with the genuine love of his subject that he then displayed. I always thought, however, during that session and the next, that he was a man who felt disappointed at his lot, one who was sensible that his ability and power of application were getting insufficient recompense as the First Assistant in Humanity.

I am extremely sorry to approach a part of my letter which I do not at all like. But the truth must be told regarding the Junior Greek Class of the University of Glasgow,—one of the three badly-administered classes of the Arts course, possibly the worst.

Now you are not to suppose that the blame for this state of matters rests entirely with Professor Jebb. He conducts the class, as I said before, only on Mondays, when his great power of maintaining order makes itself as manifest as in the Middle and Senior classes. But on the remaining days

M—— is in command, taking his students from the alphabet to Æsop, Lucian, and Xenophon. Why he is kept there I have often asked, but never having got a satisfactory answer, I am inclined to think that he has been appointed by some power superior to Jebb, who, I am sure, will endeavour to get a worthier assistant when M—— shall have departed. As to his acquaintance with the subject I cannot speak positively. It ought to be considerable, if we look to the length of time during which he has been assistant in Greek. But his appearances in the class are not such as to enable one to judge. He never attempts an explanation of a construction, and his elucidations are almost always confined to getting from the student the principal parts of the verbs which have occurred in the passage read. His grip of Greek is, I have no doubt, quite sufficient for the work of the Junior, if he could only teach what he knows. But I think I never saw a man so utterly wanting in mother-wit or “gumption.” He seemed to have no sense of his position as a University teacher. On calling a man to go over a part of the day’s work, he assumed an almost apologetic tone. “Would Mr. G—— in Bench 22 go over $\pi\acute{\iota}\varsigma$, $\pi\acute{\iota}\nu\epsilon\varsigma$?” exactly equivalent to “I’m very sorry, Mr. G——, but I require to call upon every student at least once during the session, and to-day I have to call you. I know the lesson is very difficult, and I really wouldn’t call you, but for my orders—indeed I wouldn’t. You might try to go over the pronoun.” Then Mr. G—— would get up, possibly with a very broad smile which at once

called forth a universal tramping of feet and sundry half-audible remarks about G——'s powers as a missionary and scholar. Of course there were always informers both before and behind to guide Mr. G—— over the rough and thorny path of the declension; and after his work was over, he would sit down with a still more radiant grin, getting a "That will do, Mr. G——," from the chair, in a tone that indicated the greatest relief and satisfaction. I have mentioned the feet-music. The truth is, that if a man did not receive such a greeting either at his up-rising or his down-sitting the circumstance was regarded as a phenomenon. Of course there were many attempts during the session to put it down, but all to no purpose. I think, indeed, that the latter end of the class in that respect was worse than the beginning. The attempts varied in intensity, or rather mildness. Sometimes there was nothing but a helpless childish-vexed look around the benches, and a thrusting-out of the professorial lower lip, which was decidedly suggestive of tears: at other times it would be, "O, gentlemen, this is not the way to behave;" and occasionally, when there was a probability of the noise being heard in Professor Jebb's study, the attempt would consist in a rising from the chair, and an effort after angry objurgation which only intensified the clatter, and called forth, in addition, the derisive laughter of almost the whole class. Poor M——! He is a sadly "gumptionless" man. One day a student was asked to go over a tense or two of *πύπτομαι*, but did not open his mouth. Pedal display. "Have you prepared to-day's lesson,

“Mr. ——?” Slight smile from the student in reply, two bars rest, and then increased pedal efforts by the class. After half-a-minute, during which poor M—— gazed sorrowfully around on the disturbers, the same question was again put, this time bringing out the answer, “Yes, but I’ve “forgotten it,” followed by a perfect tornado of laughter and tramping, amid which the student sat down. I think M—— ventured to ask that man to speak to him at the end of the hour. Parsing one day, a student proffered “Passive voice” in reply to a query. “No, “it’s not the passive, Mr.——” said M——, emphasising “passive,” and on the alternative “Middle” being given, he commented, “Yes, that’s it,” in so comical a way that every one understood, “Yes, that’s right, my little man. “Just make a strong effort, and you’ll soon master the “difference. I’m very well pleased with your rapid progress.” But it is quite impossible to express in words the construction that was put on all M——’s utterances by the students. Another day, when reading Homer, a *civis* evidently did not know ψ from ϕ . “You know, Mr.——,” said M——, in downright seriousness, “You know Mr.——, that “it is necessary that everyone should be acquainted with “the alphabet,” and was at a complete loss to understand the consequent *allegro* movement on the floor.

SECOND LETTER.

WHEN I began my last letter I had the intention of writing other three, thus giving one to each of the four sessions that I spent in the University of Glasgow. But now that I consider some notice must be taken of the system of study in Junior Greek, I must depart somewhat from my original purpose, and say something more about the first session. Possibly, too, I shall have a little to put down regarding the reading-room in this epistle, but we shall see,—it may go beyond the intended limits like the last.

Well then, as to the Greek Tirones. The Calendar had informed me that the class would begin with Curtius' Greek Grammar, edited by Smith, and that students would be taken from the very rudiments of the language. There was a note, however, recommending entrants to study previously the first eleven chapters, in order, I supposed, that they might be the more able to keep up with the prodigious velocity of University instruction. But time failed me sadly, as it did several scores of others; and when the first week of November came round, down we sat Tirones pure and simple, so far as Greek was concerned. Alphabet and vowels, consonants, article, the first few declensions and ἀγαθός were got up fairly well by me, though with a good deal of trouble.

The work by this time was going on in Latin, and, extremely anxious to keep up with it, I gave it the major part of my time. Indeed, it required the major part, for the class met twice daily. After ἀγαθός then, my difficulties began. I fell behind, and as the days rolled on, further and further behind. It was not entirely want of time that hindered me now; want of coolness retarded my progress, and I was in a continual fever of disgust and anger at what I considered a most absurd system of teaching the rudiments of any language. Recollections of the ——— were strong within me; the quiet class, each fellow with some desire to learn; the teacher universally recognised as the best at his subject in Scotland; the books carefully graded; the pointing-out of the difficulties in next day's lesson; the careful checking at every meeting of the written exercise for the day; and, above all, the unmistakable advance of each scholar, slow at first, but gradually accelerating. "Without daily writing, however little, of English into Greek, how is this language to be learned in a decent time?" That was the question I was ever putting to myself, as I looked at the dry paradigms, with their exhaustive notes as to dialects and roots. Of what use these to a tiro? was my constant question. How absurd, I still say, it was to ask such a man the root of a noun he could not decline, or of a verb whose conjugation was unmastered! Why, too, should he be asked to get up in his first week oxytones, paroxytones, proparoxytones, enclitics, circum-

flexes, dentals, labials, gutturals, and other such matter, interesting enough, no doubt, at the proper stage, but wholly irrelevant at a time when the pupil's task is to get up the essentials of the language? Then, again, the model verb given was $\lambda\acute{\upsilon}\omega$, an excellent verb for the philologist, but with no second aorist,—a tense which, of course, was continually occurring in our reading, when that started, to the no small discouragement of your present correspondent. I was simply furious. I knew that on a system such as Otto's, rapid advance in learning a language was a certainty. I felt too, that, thanks to the daily drill in prose which I have already mentioned, I was making way in Latin; but here in the Greek room, through this lack of daily writing, I appeared—

*“A wretch so empty, that if e'er there be
In nature found the least vacuity,
'Twill be in him.”*

I was prepared to admit that the checking of English-Greek was perhaps not so easy as that of English-German, Italian, or French, but that two or three assistants could not be got to vise the collected exercises, that I could not, would not, and shall not admit. We did get English-Greek exercises at last—in February or March—after we had some of *Æsops' Fables*, &c. But they were by no means of daily occurrence, and of the most jejune description, founded always on a passage that had been read, and suggesting it at once to us. They were not worth the name of exercises,—

only three or four sentences a week, and not to be compared for a single moment to the exercises which can be done on another system, after four or five months' work. I remember well sitting one day in the noisy reading-room trying, in my anger and despair, to get up the day's lesson. Such was my state of agitation that I could not possibly finish it to my satisfaction, and, after repeated attempts, I resolved to send in a note of unpreparation. Twice, I think, during that session, I was compelled, for like reasons, to say "Not prepared" in the class,—a most disgraceful, if not even dishonest, confession. About that time I took a walk, one Saturday afternoon, to Paisley. As I went along the snow-covered roads, I thought of the system of teaching Greek, and the enormous work I had in Latin. I was cursing my folly at ever having matriculated as a student, seeing, as I imagined, no hope of taking the degree within four years' time. Then a calmer time supervening, I said to myself that possibly with a good book I might, during the summer, get up the Greek sufficiently well to enter the Middle Class. This thought cheered me, and was subsequently acted upon. In the month of May, I got Smith's "*Initia Græca*," and began laboriously at the beginning to make up for the six months that I had lost. Not quite lost, but I am certain that all I knew of Greek at the close of the session could easily have been acquired in five weeks,—I say five weeks after careful reflection. A friend still reminds me of that Sunday early in May,

when he asked me to decline ὁμιλοῖ, and I COULDN'T. Disgraceful, to you, O my *Alma Mater*! As some proof of what can be done, simply through system, I that summer and autumn wrote and read twice through the "Initia Græca," read twice through Anabasis, Books I. and II., 300 lines of Homer, and several chapters of the New Testament, entering Senior Greek in November; and I wish to say that that was done with no greater expenditure of time than that of the previous winter, sitting in the class-room being of course included. Disgraceful again to you, my *Alma Mater*! That first session was to me the hardest and the most hopeless: never, during the remaining three, had I a tithe of the discouragement.

I have already indicated that I was not a student in Middle Greek—the *Proectiores*. In it the Anabasis, Book III., is usually read,—from a text too which gives the modern Greek version. Jebb himself takes the class daily, except Monday, and teaches it with all the skill and thoroughness which he displays in Senior. What I know, of course, of it, is entirely from students who have been members, and their reports lead me to conclude that it is somewhat like Middle Latin as regards the educational status of its *civis*. Some of the stories are highly amusing. One day a burly Western man, after reading his passage, was submitted to the usual grammatical interrogations. "What is the first aorist of δέιχνυμι, "Mr. —?" said Jebb, in his politest manner. "Tessa-

“ferr-nus.” This, in the best Argyleshire, of course caused all the fellows present to indulge in shrieks of laughter, in which the Professor had to join. Another day a student had read a rather lengthy passage, but was allowed to translate only the half of it. The next man was directed to begin translating at once, as the passage had been read. But he, being absolutely unprepared, thought in his bovine way that he might find some favour by at least reading, and began. “Oh! it has been read,” was again urged, but with no effect,—the fellow plunging on his way at about two lines per minute, Jebb eyeing him now with thorough contempt and as thorough appreciation of his intention. When the scholar had reached the last word, Jebb, with the sarcasm for which he is scarcely to be surpassed, said, “Now the ‘supreme moment has come.’” It had. Not a word of translation could be given; and the aspiring candidate for pulpit honours was put down amid the absolute stillness of the class. Another day the man up had read the passage, but did not utter a single word of English. “Yes,” said the Professor encouragingly. No response. “The dawn was beginning to break,” but still no answer. “The dawn,” &c., was repeated, and no sound being heard after half-a-minute or so, the Professor said in his usual ironical way, “Yes, the dawn is a long time of ‘breaking, indeed,—sit down!’” Another anecdote of this class was given me during the session. One day a gowned man had blundered most “woodenly,” Jebb’s temperature

gradually rising towards the boiling point. At last he ceased from troubling, and asked—"Do you intend to go forward to the Degree, Mr.—?" evidently expecting the answer "Yes." The boor, not hearing well, said "Eh?" Jebb, now quite at 212° , roared out—"Is it your intention to proceed to the Degree of M.A. in the University of Glasgow?" "No, sir," was the reply, which immediately provoked—"That is fortunate," in the most scathing tone of voice conceivable.

Such exhibitions were of rare occurrence in the Senior. There, many of the fellows were looking forward to the Degree Exam. at the close of the session,—a prospect which, of course, tended to promote thorough preparation of the work. Besides, it was to be expected of the highest class that there should be in it a standard of excellence not known in the two below. But, nevertheless, there was a scene or two. X.Y., who sat in the same bench with Q.E.D. and me, had been plucked the previous April at his Classical Exam., and was again reading for another "go." Called upon unexpectedly one morning in Herodotus, he began translating in the wildest fashion that ever I heard in Senior Greek. He was wholly unprepared, but evidently thought that his general acquaintance with Greek would get him through. But alas for his hopes!—he mistranslated, on an average, every second word, Jebb meanwhile running up the gamut of all the emotions from surprise to rage. "Um," "Oh no," "Ōh no," "Oh dear no," "Ōh dēar nō-ō," &c., &c., were ejaculated

at each stumble, with that peculiar glance of the eyes for which the Professor of Greek was noted. At last we heard "Sit down," in awful tones, followed this time by the query—"Are you going forward to the Degree, Mr.—?" "Yes," was the answer; whereupon Jebb, taking a piece of paper from the drawer, and eyeing the culprit the while with a look which meant abundantly a special review of *his* M.A. papers, carefully noted his name. There was a good deal of talk about this episode, as such was of rare occurrence in the Senior, and the defaulter was a somewhat prominent man on committees, &c. He is going to enter the U.P. Theological Hall in November, I understand.

If the method of instruction in Junior Greek was defective, that in Senior was perfection. I scarcely ever enjoyed a class so well. Between the Senior and Private, the whole of the Degree work was read, a great boon for students, who were always growling at Ramsay for the manner in which he ignored the Pass Latin. *It* was by no means all read, our time being taken up with other work. But in Greek, the whole of it was done, and in a way that was not attempted in Senior Latin. Every day 40 or 50 lines of Herodotus were set; and each Friday there was diligent revision of the previous week's work, Jebb going over the main parts of his notes once more. When Herodotus was finished, Homer and the play were treated in a similar way, the number of lines set daily increasing till, between Senior and Private, I have seen

250 lines of prose and verse gone over within 24 hours. Under such a system there was marked progress,—everybody felt it; and often I heard the remark, “It’s a “pleasure to go into *this* class.” I found Jebb very obliging more than once during the session. When the results of the first examination were published, I resolved to speak to him about one or two points which I feared I had missed. I did so, and was much gratified when he offered to look at my papers again, and let me know the result next day. It was just as I expected. I had failed to appreciate the exact force of one or two particles, together with other points which he kindly mentioned, going over them with many useful hints for their future avoidance. I felt it to be very gracious; and was, of course, the more inclined to resist the statement that Jebb rather frightened away his students from a close contact.

Regarding the work in the Senior Latin Classes of that session, I have not much to say. Ramsay was as lively and jocular as ever, teaching with the successful vivacity that I have noticed in my last; S—— still careful, anxious to promote scholarship, and turning out a great amount of work. Prose, that session, was taught in four sections, determined by an examination in November. Ramsay himself took the first, and S—— the second. Most students I spoke to preferred the latter division. Ramsay, they said, caused a man to know less about Latin prose at the end of the session; and A——, a distinguished

student, was most emphatic upon this point. I enjoyed the weekly prose lesson hugely,—partly from a desire to know prose well, partly because I liked the manner in which it was taught, and the teacher. His thorough command of Latin showed itself more in this class than the other. The smallest errors were marked on the exercises which he checked; not only so, but optional renderings were often pencilled in, and other evidences given, both of a grasp of the subject, and of a desire that every student should know it. It was to me a most enjoyable class.

To the majority of the seniors, Horace was a great difficulty. Ramsay had more trouble than ever in securing the Queen's English, and often we heard, "Oh, sir, what language is that?" from the professorial lips. Few, moreover, were *au fait* at the Horatian metres. Once a man, whose quantities had been most defective on the preceding day, was again called up. The same lapses taking place, the Professor, with inimitable irony, said:—"Really, sir, I must beg you to show some consideration for the taste of these gentlemen around," indicating the gentlemen by a sweep of the arm which included the whole class.

The Degree Examinations came on in April. About a fortnight before, the list of candidates—about a hundred in number—was posted up. There were many degrees of advancement in classical knowledge. Some knew no History at all, others had read only the 9d. Primers, and

almost all were shaky about Antiquities. The History, Antiquities, and Grammar are all on one paper, called the General Paper, and on every hand we could hear, "The General Paper will stump me," "I wish the General Paper was over," &c., &c., while a good many were fearful about the prose, and well they might be. More than half the candidates were men of the Third Prose Section, while there was a goodly sprinkling of the Fourth. What a fortunate thing it was for these gentlemen that the requirements exact but "moderate proficiency" in prose. The proficiency must have been very moderate in at least one case I heard of. The candidate had written the usual paper, was called up on Wednesday to a second, on Thursday to a third examination, and passed. One version of the story was, that on the Wednesday he was examined orally on Homer, and on Thursday on a second prose paper; but, whatever the exact facts on this score, there is undeniable room for doubting that candidate's claim to the Degree of M.A. Let us hope that either he will prosecute his classical studies, or fall into a sphere of life where his "moderate proficiency" will do little harm. There was a good deal of disgust manifested by the "distinguished" men,—those who had been acquitted on Tuesday evening. The posted list of passes showed their names specially marked, but on their certificates there was no mention of the circumstance, nor in the Calendar either. One fellow spoke to Ramsay about it, but the answer only was that it never had been

done; and, of course, what has served so well in the past is quite good enough for the present and future,—at all events, that seems to be a maxim of our Universities. But the editor of the Glasgow University Calendar is somewhat inconsistent after all. Although he does not mark the “distinguished” men in the Arts Degree Examinations, he does so occasionally in the Law Faculty! By the bye, the story goes that Jebb, when appointed in 1875, was extremely anxious to raise the classical standard, by allowing only “distinguished” men to pass. If that be so, his heart must be gladdened by the recent resolution to impose some extra reading, as well as a possible piece of unseen translation. The latter addition seems to be a step in the right direction.

That session too, I took a Mathematical Class,—the Junior. Just as the Professor of Humanity was compelled to wander about in order to find rest for the sole of his foot, or rather for his pupils’ soles, so was the Professor of Mathematics compelled to occupy Astronomy Room, Conveyancing Room, &c., &c., for the convenience partly of his students, partly of himself,—his roll being so bulky. By the way, I recollect Professor Ramsay calling attention with evident satisfaction to the fact that, though recently built, the University was already too small for the number of students that were flocking to it.* Well, I was a Junior

* Like an unwise tradesman boasting of the number of his customers,—the secret being that he gives his wares to all who ask for them, without ascertaining whether they will ever pay the bill!

Mathematician, having for teachers X—— and W——, the one in Algebra, the other in Euclid. The former was quite a biological study in himself. Some days "his countenance was changed," presenting hues nearly akin to those of the red end of the solar spectrum, while upon his forehead and cheeks a curious sweat exuded, which he wiped away from time to time with a pocket handkerchief. On these occasions too, his eye seemed to be dim, and the natural strength of his limbs considerably abated, for his right hand clung pertinaciously to the black-board pillar; while curiously enough, the tones of his voice seemed much louder than usual,—their power, in fact, varying inversely as his strength of legs. These manifestations were not always equal in character, but they seemed to reach a maximum intensity every twenty-one days or so, when a holiday was immediately appropriated by the class. Balls of tightly-rolled paper were then pitched freely about the small room, darts formed of the same material floated airily through space, and occasionally even struck the phenomenal assistant upon the nose. "Not prepared" was a most frequent statement. I remember one day six fellows in succession uttered the fun-inspiring words, and, curiously, X—— rather seemed to like it, joining in the laughter quite hilariously. W——was a different man. He was fresh from student-life at Oxford, and for the first two or three weeks did show some incapacity of understanding that a beginner might have difficulty in deducing a rider. He gradually awoke, however, to this fact, but ever and

anon, even in Middle Mathematics, showed a tendency to consider everything as equal in easiness to 2 and $2 = 4$. This was particularly noticed by the whole of the latter class one day, and, of course, duly cheered. The subject was a deduction from one of the last Propositions in Book VI., which took W——about half an hour to go over himself, with so many “of courses,” and “it is clears” that the accompanying patter of feet at last broke out into a perfect earthquake. Not two men in the large class, I am certain, were able to follow him. But this is away from the Junior. Well, these were the teachers we had,—not particularly able, as you can see, and I don’t think they or we were helped when Jack took the class, simply because his visits, like those of angels, were “few and far between.” He came, on an average, once every three or four weeks, and then taught extremely well. The student would be dull, indeed, who could not profit by his quiet, gentle way of teaching. He evidently was sorry that he could not be more frequently with us; at any rate, he explained one day that this being his first session, arrangements were not quite what he would like, but that the following year he would be able to give as much attention to each of his classes as his assistants.

There was a good deal of “pawky” humour in Jack. When it became known that he was to take the class—I speak of my Junior session—for the day, many declined to go in, fearful, evidently, that there would be “an awfu’ through-pittin’.” What they were

afraid of was this: Jack, while carefully explaining away every possible difficulty, kept the class in such thorough order and quietness, and used up every moment of time so well, that he had half the class up before the end of the hour. This, of course, would mean a bad mark to a good many. But to the humour. On such a day, after the roll was called, Jack would say, "There seems to be a dreadful "amount of absence in the class to-day, gentlemen," with a pretended look of anxiety, but an unmistakable twinkle at the same time in the corners of his eyes,—a twinkle immediately appreciated by the whole class. Again, on wishing us to refer to—say page 404 of the Algebra, he would hold the book close to his face in turning up the place, and looking slyly round the edge would say, "If "gentlemen would turn to page 404 they would find some- "thing to their advantage." This reference to the advertising columns of a newspaper, and from a past Editor of the *Glasgow Herald* was, of course, instantly commended. One little expression Jack used at least once-a-week. In—say the Binomial Theorem or bringing out a logarithmic decimal, he would say, "We shall stop short here," and never evidently could comprehend the pedal movement which greeted the remark. Has Professor Jack never heard "My Grandfather's Clock"? On the whole, Jack was extremely well liked, even in spite of the fact that he was striving to gradually raise the mathematical standard. It was quite right to raise it; his predecessor had allowed it to fall very low.

I do not know whether you were ever in the Reading Room at Gilmorehill. It is open every day to students from nine till three, and is largely taken advantage of, not altogether, however, for purposes of study. Comfort there is, in so far as reading-benches, chairs, forms, &c., are concerned, together with a fair supply of maps on the walls, and of reference books in possession of the keeper. But there the comfort stops. From nine till twelve daily, and especially from ten till twelve, the hours between the closing of Junior Latin, and the opening of Junior Greek and Middle Mathematics, the reading room of the University of Glasgow becomes something between a Lancashire skittle-alley and a high-class bear garden. Enter, and you will find the room crammed with about 400 of the matriculated, chiefly students in arts, doing everything but their lawful work. There is not sitting accommodation for the crowd, and here and there in remote corners groups gather together and discuss, with much shouting and laughter, the last University foot-ball match, or the latest vagary of the first assistant in Mathematics, or some other subject dear to the academic mind. The reading desks are all occupied, books are open, doubtless, but all are not by any means doing work. Many are talking to their neighbours, others are wandering up and down the benches paying their morning calls, or trying to borrow from some abler scholar the Latin Prose or the Mathematical Exercises for the week, in order to copy them. One musical genius persists every five minutes in sounding a C tuning-fork ; another indulges

in the school-honoured custom of twanging a fragment of steel pen inserted in the desk before him; a third favours the company with an occasional imitation of a dog's howl, his effort being gratefully acknowledged, as well as that of his tuning-fork condisciple, by a perfect tornado of applause. Then perhaps a piece of coal may fall out of the grate. This, to the undergraduate—temporary or life-long—is a piece of the most enchanting fun, and is applauded by the usual loud tramp, increasing to *fortissimo* if a servant is seen to take the tongs and restore it to its place. It is an “unwritten law” too,—talking of the piece of coal—that no one shall venture to approach the fire-place on any pretence whatever. If some unfortunate freshman, in his agony of cold, is seen to stretch his frozen hands over the blazing coal, the hooting compels him to beat a hasty retreat; the barbarous people show him but little kindness. One day a large retriever found its way into this place of all the devils. It at once became the centre for observation and remark. Barkings, led off by the imitator before-mentioned, whistlings, yells, occasional thwacks with a stick, &c., at last got the dog into a dreadful state of excitement. Frothing at the mouth, it ran up and down between the benches, till at last, finding no means of exit, it began to leap over them. Half the students then stood up on their forms—the more timid trying to get out of the place, the dog snapping now at everything in its way. I would not have been one whit sorry if one stupid-looking, large-sized

block of humanity had got a good bite. He was a teacher who, after obtaining his "parchment," had determined to spend a year or two in the University, and was in the room daily, signalling himself by his loud—or rather loudest—voice, and coarse jokes and actions. A big six-foot lubberly-looking hulk, just one of the "dull conceited hashes" of Burns—the supremest dunce, I was informed, in Lower Junior Latin, and delighting—in quadrangle and elsewhere—to knock the heads of young students together, run off with their hats, and generally play the part of Merry Andrew. A more lamentable specimen of bearded humanity of twenty-five I never saw. Well, here he was, acting as fogle-man on this red-letter day in his eternal-holiday calendar; but, unfortunately, the dog could not distinguish the arch leader in the riot, in order to give him the mark of his teeth. One fellow, used evidently to dogs, ultimately got hold of the animal by the lower jaw, and dragged him out of the place. That, of course, was a specially bad day, but the noise of the regular days was quite sufficient to stop all steady work. Several times earnest-looking fellows were observed to ask their neighbours to remain quiet for just a little, but the result was frequently derisive laughter. For my part I admired the stillness of the Mitchell Library, with its rows of often ill-clad, but always orderly readers, evidently digesting what their eyes scanned; and I could not help comparing them with the trade-marked men of Gilmorehill, in all their riot and carelessness.

But you may ask, "Was no effort made to put down this Babel?" There was, but, unhappily, of a milk-and-water, zoedone sort, and by one of the milk-and-water, zoedone sort of men. He was an assistant librarian, whom some students named Mephistopheles, and others Beelzebub, whose duty it was to give and receive the books of reference previously mentioned, and exercise a general supervision over the department. But, unfortunately for his powers of administration, a thoughtless Heaven had given him some poetic power; or rather Beelzebub himself imagined that a double portion of Macaulay's spirit had fallen upon him. He was the author of several scraps of doggerel, which, from time to time, were taken out by some laughter-loving student; but his chief claim to fame rested on some Classical Lays, of which he was the putative father. Well, this poet had ever poetry in his head: he was always thoughtful, dragging himself with difficulty out of his world of fancies when you asked him for a book or other such mundane object, and immediately lapsing again into his state of cherubic coma. Such a man was clearly not the man to rule. It was intensely comical to see the helpless creature gazing from under the brim of his pot hat on the sea of riot below and before him; and, in seventy cases out of a hundred, turning away from it in evident despair. But, on the remaining thirty, he spoke, and no doubt as he did so, he thought that cloud-scattering Jove never hurled such thunder from

Olympus ; or that, at least, Domosthenes never used such periods. But to his auditory Beelzebub was only a windbag. As the polysyllabic words followed slowly after each other, yells of laughter, intermingled with shouts of "Speech," "Spout," "Shakspeare," &c., &c., were heard all over the room, while the assumed look, partly of contempt, partly of conscious superiority to such *canaille*, made even the gravest student smile. Poor, helpless Beelzebub, would he could find his proper sphere !

You will by this time understand that the abler students were rarely seen in the reading-room. They seemed, for the most part, to be housed near at hand, and going home, even for an hour, was to them no hardship. Those who resided at a distance visited the room only when they desired to consult a book. They were to be seen often walking about, on fine days, on the terrace in front of the southern gateway ; on wet, near the grand stair-case. The reading-room was not for them.*

* Curious to note how sound asleep is this University !

THIRD LETTER.

MY third session in the University of Glasgow was spent in (1), a Mathematical Class; (2), English Literature; and (3), Logic. I shall endeavour to state my experiences of these, though I fear they may be not so full as those of previous sessions.

As a rule, all the Mathematical Classes, from Lower Junior to Extra Senior, were conducted with great zeal and ability during this session; and I am informed that even yet they are among the most agreeable classes of the Arts course. In all of them, both Jack and his assistants took excessive pains to make everything clear, and, by their judicious system of monthly examinations, advance was almost a certainty. One feature I did not much care for—the system of weekly exercises. Certain problems were put on the black-board on a given day, and on the corresponding day of the following week each student was required to send in solutions, either of all or part, as he found himself dowered with time and ability. But few seemed to care who did the exercise, provided it was done. On the day the solutions were to be given in, the better students were besought for their exercise, in order that it might be copied, and, in this way, I have

seen one set copied no less than seven times! There must have been strange similarities presented to the eyes of Professor and assistants; indeed, they admitted it, remarking, occasionally, on the singular coincidences in the methods of working out. I always thought it would be far better, in the interest of both mathematics and morality, to banish the weekly exercises altogether, and have more frequent written examinations, say fortnightly, or even weekly, like Sir William Thomson.

I liked the style of Jack's certificates very much. Discarding the general language that is too frequently seen on such documents, his form bore some such phrase as, "That in the Monthly Written Examinations he acquitted himself so as to be placed in the — of the four grades of merit," the precise grade being filled in at the end of the session. "With credit," "most satisfactory," "very satisfactory," "extremely well," "with distinction," &c., &c., were thus done away with, and the student characterized in a business-like, intelligible, and precise manner. I once heard a Professor complain of the difficulty he experienced in trying to vary the phraseology of a certificate. I feel sure that a form such as Jack's would go far to relieve the unpleasantness which he felt.

In a class where so much work was turned out, there were, of course, few opportunities for the development of individual peculiarities. One day, however, the assistant in charge had called upon J. N., evidently a fellow in well-to-do circumstances, who posed as "the wit" of the

class. Looking around carefully for quite a half-minute, to make sure that another J. X. was not the man meant,—the rogue knew well there was not such another surname in the benches,—he at last arose, slowly and majestically, the teacher looking on the while in amazement. Once established on his legs, X. was asked to demonstrate the theorem on the board, and then began the “coolest” exhibition I ever saw in any class-room. He did not know the demonstration—not a word, but with the utmost *sang-froid* began to pull down his wristbands, and refix the solitaires in the same. The latter seemed strangely refractory, for a good many seconds were expended upon them before J. turned attention to his collar. It was of the vertical sort, standing about an inch and half above his coat, and “on this occasion” appeared suddenly about to strangle the wearer,—at all events there was an extraordinary amount of time expended in twitching and pulling it “into position.” This done, one would have expected him to begin work; but no. Waistcoat had to be pulled down, fingers run through his hair, nose blown, and the handkerchief restored to the outside breast-pocket with a little affectionate tap, the proper superficies of visible white being carefully ascertained. All this time the assistant was standing, evidently wondering what piece of audacity would be next ventured upon, and when a lull in the toilette performance took place, turned to the board in expectation of J.’s first sentence. Conceive his surprise,

and the laughter of the whole class, when—quite two minutes having now been spent—J. X. quietly said: “Don’t see the board, sir.” As a matter of fact, the board was only six feet off, and the light quite satisfactory; but, nevertheless, the board was turned through an angle, suitable to both the solar rays and J.’s field of view, and then—then the bubble burst—J. X. did not know the Proposition, and another man had to be called. The assistant being new to office did not probably feel very well acquainted with undergraduate habits and customs, but the very next day, his fellow-assistant called up, as the first man, J. X., with a “Do you see the board, Mr. X.?” and an appreciative twinkle in his eyes that sent himself, J., and all the class into fits of laughter. The assistants had been comparing notes.

English Literature that session met in the month of January, although now, I am told, it begins in November with the other classes. To me and several others it was a matter for regret that only four months were devoted to a subject so interesting to all, and one, too, covering so much ground. You may possibly know how it is that all the other classes have a couple of months more, while the only class in the Arts Curriculum which makes an honest attempt to teach so valuable a subject as History is put off with so little time. I have mentioned History, because I feel strongly that it should have a place in every nineteenth century course of education, and I was much gratified when, on the opening day, Nichol

intimated that so long as it was not directly recognised in the University, and so far as his time permitted, he would endeavour to teach it. I liked his opening announcements very much, particularly, of course, the one I have just mentioned. Another which pleased many of us was the frank statement that he did not expect us to take down his words *verbatim*, as the text-books extant in the country could give us the desired information as well as he. How different this from the arbitrary proceedings of certain lecturers, of whom we have one or two in our *Alma Mater*! Following up his statement, he gave us a list of books upon his subject, which we found of great advantage during the subsequent months. Another thing I liked, too, and I know that many shared the feeling, was that I felt myself under a recognised master,—a man, like Jebb and Sir Wm. Thomson, with a wide reputation for genius and scholarship. But “No mere man in this life is perfect,” and Nichol, I think, was not quite in the right with regard to one little episode of the session. It was this. As in other examinations, so in English, “cribbing” went on to a certain extent, and Nichol found out certain examination papers which showed coincidences of a remarkable nature. Fellows had indeed been copying. I myself was requested for information at one of the examinations, and even at the Classical Degree the son of a well-known D.D. of the U.P. Church breathed a request to me for my papers. The Senate had long been troubled with these malpractices, and

Nichol informed us that he, for his part, was determined to make an example of defaulters. And he did. He posted up the names of the delinquents in red ink in the quadrangle, so that all who ran might read. So far, right; but he lost too much time in the class-room dwelling upon the enormity and circumstances of the offence, and it was in regard to this that I thought he went too far. His attempt to stop the evil-doing was most praiseworthy, and had it been as short as it was sharp and effective, all would have been well, but he said too much about it,—too much in the limited time at disposal for the enormous work of the class.

The lectures, at first philological, and then purely literary, were extremely interesting. They were delivered rapidly, too rapidly for note-taking of a full sort, but then it was expected—and rightly expected—that previous reading should have prepared students for this. I occasionally heard complaints about this rapidity, but never from those who were well acquainted with their native literature. To them the lectures must have been very fine, being delivered with a brilliancy and effect that no other teacher—I mean lecturer—in the University can approach. Nichol, like Jack, seemed to have the knack of inspiring students with a liking for his subject, it being granted, to be sure, that there was some desire to learn as a basis to go upon. And one great advantage in the English Class was this. Answers got anywhere, provided they were correct, were always taken, in both oral and

written examinations. There was no slavish and withal foolish adherence to the views of one man.

And this last remark leads me most appropriately to consider the Logic Class. But, before doing so, I crave permission to introduce to your notice a friend of mine, in the shape of one of his lucubrations. This particular effusion was penned immediately after he had concluded his studies under Professor Veitch, in the hope that it might appear as a leader in a certain newspaper. But from a defect in style, never clearly visible to himself, it was compelled to lie "unhonoured and unsung" for twelve months among other innocents which have been editorially slaughtered. Knowing, then, that his views as regards one feature of the Logic Class were the same as my own, it occurred to me that I might save myself labour, and confer a favour on my friend by introducing his article to your attention. Deal tenderly with the article, I pray thee,—even the article of my ardent friend. In many respects it may be too like the columns of ephemeral literature with which we are acquainted, but it has at least the merit of not containing a single reference to "Hamlet," and of not telling you for the 10,000th time that there were kings before Agamemnon.

*SOME SUGGESTIONS FOR OUR UNIVERSITY
AUTHORITIES.*

The Earl of Derby is one of the few—the very few—among us whose utterances on matters not only political, but social and intellectual to boot, are well worthy the perusal and study of all thinking men. Unlike certain so-called leaders of the State that we have known, not his own, but his neighbours' welfare seems to be the object of his care, and what he has to say always gives abundant proof of earnestness and impartiality. His last deliverance but one was on the altered state of our Houses of Parliament, due in great part to the operation of the Reform Bill of 1867, and the changes that are necessary—in the Lower Chamber at all events—in order to moderate the obstructive “wind” that has lately compelled honourable members to endure sederunts of from 20 to 26 hours. His Lordship thinks that, in conducting the affairs of the nation, we do not recognise the “spirit of the age,”—that we are, indeed, very much in the position of Simon de Montfort and his patriotic Parliament, 200 years before the invention of printing; and that an intelligent use of the press would diminish the often needless rhetoric of our representatives, and further the interests of the British people.

It is not our present intention to discuss the benefits that would follow in St. Stephen's from a judicious adoption of “print,” but to direct attention to a class of

institutions where a seeming indifference to its value is sometimes shown. A commercial man, trained from the first year of his apprenticeship to adopt the quickest means of accomplishing an end, would scarcely believe that in some class-rooms of our Universities methods of teaching exist which do not much differ from those in vogue in the times of Thomas Aquinas. *All* commercial men, it is true, have not yet put themselves abreast of the times, for we do sometimes hear of one who, ignoring the advantages of the copying-press, cheerfully transcribes, at immense labour and corresponding cost, every scrap of writing that passes from his establishment. Such a one is very properly regarded by his fellows as a *rara avis*, as a man of emphatically crank views, and well worthy of the jokes which are made at his expense. But how stands it with certain of our Professors? Day after day, week after week, and year after year, the same man gives almost the same lectures to bodies of students, numbering from 20 or 30 to between 200 and 300. *Almost* the same, for, foreseeing that student of the first year might lend his copy to student of the second, and he in turn to one of the third, were the progression of lectures always the same, our teacher makes cunning excisions here, and *ditto* insertions there, *notching*, in fact, his mass of matter, and fitting in to notch No. 1 the piece cut out out from notch No. 19, and so forth, in what manner every reader can easily understand. All this results, of course, in fresh copying of the lectures year after year by every

anxious student. There they sit, whole sixty minutes, from November 1st to April 30th, Sundays and Saturdays being always excepted, engrossing most copiously, and in many cases most inaccurately, with a view to pen-and-ink transcription at home. Most copiously, for said transcription will cost the student two or three hours' time, in proportion to his capacity; and in many cases most inaccurately, likewise in proportion to capacity, but also the inevitable result of long-hand notes of a rapidly delivered lecture. Now, should these things be? Is it right that Scottish students should have these hours of next to useless labour added to their hard-working day? They are not the children of wealth, with time *ad infinitum* at disposal, but only scantily endowed with the goods of this world, and obliged—as Mr. Gladstone showed in his Inaugural Address at Glasgow, in December, 1879—in two out of every three cases to add private employment to the burden of their studies. No Raynal need say to them, “*Debout, canaille fainéante, debout, aux champs, aux ateliers!*” They have the *champs* and *ateliers* even during the session to an extent that seriously hampers their working powers, without reckoning at all the further drag we have just indicated. It might be answered that they are thus enjoying the *vox viva* of the teacher,—the most effective method, in the opinion of some, of imparting knowledge, but in the anxiety to get as much as possible noted, the student has not even a tithe of the reflective power

necessary to appreciation. No; it is only when transcribing that he is able in any measure to begin the study of what has been said in the class-room, and then the unavoidable incompleteness of his notes,—aided though he be by a copy, also incomplete, of former lectures,—clogs his power to an extent that examination figures abundantly signify. Indeed, it is not too much to say that the knowledge gained by the average student at the end of such a week of work could be possessed by another method in about a third of the time. And that method is such an obvious one as this. *Print* the lectures, in the name of common sense, if those already extant in the literature of the country are not of merit high enough for the erudition of the Professor, or for the Degree examination. The cost of a copy might be actually *less* than the aggregate for note-books during the six months. Prescribe a daily lesson for home study, and let the teacher expound the more abstruse points in oral examination of six or ten students. No fear of his occupation being gone, for points there are in almost every University class-book in need of elucidation, and, if not, there are students in need of *illumination*, and much of it. Examine thus daily, not once or twice a week, as is often the case, and so compel all.—for we have in our Scottish Universities a slight sprinkling of men who regard the academic course as a most pleasant means of passing two or three idle years—and so compel all, for their own credit, to undertake some amount of study.

Have the written examinations still; they are probably the best of all examinations, but their comparative infrequency—two or three per session—is not sufficient *goad*ing for the sprinkling above mentioned. Nothing for *them* but the fear of being called upon daily for a *viva voce* examination, for which they are likely to make some effort, for the sake of their good name.

These are the chief means that have occurred to us for the amelioration in this respect of our Scottish Universities, and, though their Conservatism rivals in many points that of Oxford and Cambridge, though “vested interests” may emit a shout of horror at any proposed change, yet we feel assured that the good sense of the nation will secure improvement at no distant date.

So much for the method of instruction in vogue in the Logic Class, for you must clearly understand that no other class was in the writer’s mind as he was producing his article. A little now about other related matters.

Firstly, then, I must say that never in any Arts Class did I see so much deliberate inattention—deliberate and unreprieved. As you have already surmised from my friend’s article, the Logic Lectures are of some antiquity: are, in fact, substantially the same as those delivered nine or ten years ago.* The result of this is that not a few of the

When I was in the Logic Class in 1866, it was believed that we heard the same lectures as were delivered by the Professor in the first year of his appointment, and my copy of 1866 was of some use to a student of 1880. *Substantially*, therefore, these lectures must be even older than my young friend supposes.

students possess MSS. of former sessions, which, bringing to the class, they lay open on the benches before them, and indulge, some in a nap, others in a general inspection of their fellows, relieved at times by a prodigious yawn, or by their share in the pedal consequence of some orthodox proposition from the rostrum. One or two are busily engaged upon a volume which manifestly has no more connection with the subject of study than Tenterden steeple has with the Goodwin Sands; and a F.C. minister of my acquaintance told me recently that he regularly read the morning's newspaper while the biographer of Hamilton was prelecting! Too bad! and one "of the more straiter sect," too.

Secondly, the advertised hour of meeting was nine o'clock; but the time of starting work—if I may call it work—averaged seventeen minutes past throughout the session. How so? Because students "from the country" were permitted to come in a little later through the private room, a liberty granted in no other class of the University, so far as I am aware, and of which they availed themselves to the fullest extent. Not only they, indeed, but others, who were without doubt "of the town towny," passed themselves off as suburban residents, despite the repeated statement of the Professor that the concession was only for those specified. But what more could be expected "in these times?" All were evidently expected to be in their places before the lecture began, but entrance frequently took place afterwards, to the

interruption of the professorial harangue, and the expressed delight of its hearers.

Thirdly, but with your leave, I'll give over this sermon-like way of writing. Professor Veitch never called the roll himself, for what reasons I know not. It was done by one of the students, who, you may understand, did not get the readiest possible answers—the more witty, or wicked, as you please, taking a malicious delight in “bothering” the roll-keeper. Then, of course, the chair interfered, but not in the manner that Ramsay or Jebb would have done, had they, indeed, been fools enough to countenance such a system of attendance-scoring. No; the chair remained almost strictly passive, its occupant signifying disapproval by simply raising the right forearm through an angle of about 90° , the arm of the cushioned *fauteuil* being used as a most convenient fulcrum. Such a “fusionless” mode of quelling academic disturbance had little effect—talk and laughter went on undiminished from the beginning of the roll-call to the end. One morning the book-keeper failed to say “Adsum,” and Veitch was compelled, with evident reluctance, to discharge the duty himself. Never shall I forget the remark made in the bench behind me, in stupidly-orthodox, slavishly-admiring tones, “It’s ta o-o-ald “maan himself this mo-o-arning.”

But the roll called, business began. The lever ceased to act, inertia was overpowered, the arm-chair vacated, and the lecture, strictly peripatetic to the end, was begun.

Far be it from me to interfere with the time-honoured *Trivium*,—with the Psychology, Logic, and Rhetoric of Professor Veitch. But I would like to say that a host of other subjects, each more important than either of those three, have sprung into consequence, even within the last century;—that systems of belief that were satisfactory to Milton and Newton surely will *not* prove satisfactory in the last decades of the nineteenth century, however highly the affirmative may be applauded by certain of Mr. Veitch's hearers;—that I have read Hegel, am reading Hegel, and, under Providence, shall read Hegel for a long time to come;—that the text-book of Jevons might be found a highly satisfactory substitute for "Whately," where the parenthetical bracket abounds to an extent that would have roused the ire of Carlyle as much as Croker's Boswell's Johnson;—that the models of literature are not always to be found in Scottish prose and Scottish poetry, and that a more generous recognition of the products of England, of France, and of Germany would be hailed with delight;—that Professor Veitch will never again, I think, attempt to repeat the whole of "Sir Patrick Spens" to his class: he tried it one morning, got quietness for the first two stanzas, slight disturbance *crescendo*, for the third, incipient jeering laughter during the fourth, which, increasing to *fortissimo*, compelled the lecturer to cease abruptly at the close of the sixth or seventh. Enough for the Lectures; enough, like Chaucer's Host, "In Goddes name."

I alluded to goats in my first letter. Here they were in

full bloom, listening with ravishment to the "hardy annual" delivered from the platform. Just two anecdotes about them, and I conclude this too lengthy letter. One is about Z., an engineer, who works in summer and "studies" in winter, thereby securing the present admiration of his friends and the future of his congregation, as expressed in the phrase, "He brocht himsel' thro'." "Of his congregation," for he intends to occupy U.P. premises, more or less commodious, in the near future, where he will endeavour, no doubt, to merit a continuance of the patronage, which first took the form of a Bursary, presented to him by a wealthy but short-sighted and orthodox Dissenter. Well, when the results of the first Logic Essay came out Z. was Third Class A, while K., admittedly—by Professor and students—the finest essayist of the same session in Senior English Literature, was Fourth Class B! And the mark of exclamation is thus justified. I myself heard Z. say that "he jist tuk the lecters twa nichts afore, an' cōpit thum oot," this statement being made after he was asked a question regarding the draft of his essay. HE DID NOT KNOW WHAT A DRAFT WAS! My friend O., who saw the—well, for convenience sake—essay, after it had received the professorial approbation, said that from beginning to end of the 22 pages it was one big sentence, the only capital letter being at the beginning. "Besides," added O., "there was on an average two errors in spelling in every line, and I noticed that wherever the word 'does' occurred it was spelled 'dose!!'" K., I

remember, was very much distressed about the result; but his thōt—as Professor Veitch pronounced it—must have been inferior to that of Z., who was then in the third year of his university course.

The other story is this. A.S.S. rose almost a class in the Second Logic Essay, as compared with the First, being now put in the Third Division. Elated with success and conscious philosophical talent, he gave what he called “a stret tip fur an essay” to one of his admiring friends. Said A.S.S., “Jist you begin ivry sentunse wi’ a capital, an’ yu’ll see.”

FOURTH LETTER.

I MUST again break the intended symmetry of my epistles, in order to give a few further recollections of the Logic Class.

You are well aware that, in addition to the lecture given at nine a.m., the class meets three times weekly at eleven, for the purpose of oral examination on the prelections and on Whately,—the Professor taking the former, and the assistant the latter. I was present at very few meetings of the eleven o'clock class; curiosity alone prompted me to visit it two or three times, just as extra academical work permitted. And I was extremely glad that I was not enrolled as a member, because, in the first place, I found that I was getting quite enough for my taste at nine o'clock, and because, in the second place, the eleven o'clock class almost rivalled Junior Greek in disorderliness. Possibly Professor Veitch kept it better in hand, but when the assistant was in charge, as was the case on the occasions when I visited, the din was "fast and furious." And it seemed to me that the "great first cause" of this was the Assistant Professor of Logic himself. He was of the Peter Nimmo type,* in so far as attendance goes, with a figure once good, but now

* Referring, no doubt, to the hero of an early and rough poem by Thomas Carlyle.

injured by excessive study, and a face of almost unparalleled mildness,—the Assistant Professor of G. being always excepted. That he was a scholar was undeniable ; indeed, some students have said to me that he evidently had a better acquaintance with the subject-matter of the class than the translator of Descartes himself. And certainly, on one of the days that I was present, he showed considerable discernment and justice, by quietly saying that there were better books on Formal Logic than that of Whately, but that since it was adhered to by Professor Veitch, it would be well for all to study it. But with all his powers of scholarship, his face showed abundantly that he was not a ruler of men, and of this his hearers seemed to take full advantage. Over and over again he begged them to remain quiet, in order that the work might proceed, and on two of the occasions when I was present, he asked them to try to prepare the work before coming to the class,—such requests being made with a gentleness which at once proclaimed that they would receive but little heed. A subdued buzz of conversation went on during his whole hour, diversified by the usual foot-pounding when a student rose or sat down, or by a laugh at some excellent joke, while, at the time of my last visit, there was an attempt evidently to light a pipe ! I cannot describe the helpless look of the assistant when he heard the striking of the match !

I have already said something about the essays in Logic : let me say a little more. I had often,—well,

eight or nine times from as many former students,—heard that these were judged by Professor Veitch according to weight, but not till the last session of my course did I get something like satisfactory evidence of this assertion. There are three essays set during the session. R. himself told me that his first consisted of twenty-two pages, and was classified as third; his second,—unfortunately I did not note the number of pages, but I recollect saying to myself that the progression was an arithmetical one of about thirty,—was in the second division, while his third, of nearly ninety pages, was marked First Class! Far be it from me to enunciate a general proposition on a particular case, but is not the fact noteworthy in the interests of scientific investigation? Another fact is this: a fellow I know, who had his first essay docketed third class B, got, in his passion of disgust, a former prizeman of both class-work and summer-work in Logic, to write the second essay. *It* was marked third class A! For myself, I knew that my tastes tended toward the exact rather than the hazy sciences, but I determined, nevertheless, to give the subject an honest trial. Here is what I did, and the result. First essay, third class; second, third; third, not done;—interest in work by this time gone. First examination, near the top; second, near the bottom; third, stayed at home. Certificate bore that in “two of the “three written examinations he acquitted himself with “credit!!” Right, my Teufelsdröckh; man *is* by nature somewhat of an owl.

I have not much to say regarding the class of Moral Philosophy, which I attended in my last session. The teacher is, as you know, widely respected; his subject has a powerful attraction for the majority of students, and these facts combine to secure an orderliness and attention which make this class one of the pleasantest in the University. I have said "the majority" of students, but, as a matter of fact, I never heard one say a harsh word of either the Professor or his lectures. Once only a man ventured to remark that he did not care for the work of the class, "although," he added, "Mr. Caird takes great pains to "make everything interesting and clear." But the observation only educed very evident marks of surprise from the four or five who were his auditors, one giving expression in rather forcible language to what were doubtless the opinions of all. Personally, I liked Caird's evident desire to do his duty. His lectures did not "lose themselves in vain "repetitions," but were evidently re-cast every year. He required every student to write weekly exercises for his inspection, and, though taking up at a time only the third or the half of the benches, these exercises must have cost him a great deal of trouble and time. Not only exercises were required, but every three weeks there were from six or eight to about twenty optional essays handed in, all of which seemed to get his perusal and criticism. Indeed he informed an acquaintance of mine that he worked at least four hours a day at his class exercises and essays alone; and certainly, one day that I was in his house, and

at so early an hour as ten, he was busy at an immense pile of work from the pens of his *civics*. For myself, I thought that less writing might have been demanded from us: you know, I do not care at any time, or on any subject, to study from written lectures; and the amount of time which I had to spend in a week over lectures and exercises was occasionally grudged. Had there been a printed text-book instead of the former, all would have been well: the practice of writing periodical exercises was an excellent way of getting up the subject, and of being quite ready for the Degree at the end of the session. More than one student has spoken to me of the benefit which he derived from these weekly tasks.

I have said that Caird must have spent "a great deal of trouble and time" on the class work. Let me say something about the trouble. Although the Class of Moral Philosophy is taken by students in their third, fourth, and fifth sessions, after, it is to be presumed, a considerable amount of mental *pabulum* has been digested, still, in it were to be found a good many indubitable "goats"—goats, probably, to the end of their time. They were of different degrees of dulness—different, indeed, in every respect but one, and that was an intense admiration for Logic and Moral Philosophy, and as intense a contempt for Mathematics and Classics. During my four years I spoke to many of these men, all of whom were full of delight with the "Mental" Classes, or with the prospect of joining them. Jebb, by the way,

seemed to be the object of their special detestation. Frequently, after a prolonged exaltation of Veitch and Caird in most questionable English, the flow of ideas would suggest their arch-persecutor, and a sudden digression would be made to the question, "Isna' Chebb an "ahfool man?" Speaking one day to one of them, and trying vainly to uphold the scholarship and skill of the Professor of Greek, and his undoubted good-will and pleasure when work was well done, I was interrupted and crushed by, "Oh, ei fear tat he is not a ferry coot man. "Ei am tol' tat he neffer coes to ta church!" But to Moral Philosophy. Of course one could not here judge so well of the capacities of these men as in the Mathematical or Classical rooms. Caird evidently seemed to understand that these men *wished* to become philosophers, and treated them very considerably when under oral examination; but still their peculiarities leaked out. Caird himself once confessed that the spelling in the class was dreadful; this was the English spelling, mind you, and I often wished I could see how they treated Montesquieu, Schleiermacher, or some of the other proper names which the Professor mentioned. There was always a great deal of motion and asking, "What's that?" when such a name was heard. And an incident happened one day, not far from the beginning of the session, which shows abundantly the manner of men who are completing their University course. An intimate friend of mine occupied a seat on a bench just immediately before one that was filled evidently

by missionaries. I remember the bench well. That they were engaged in ecclesiastical work was apparent from their conversation, and certainly their dress "bewrayed them." They were all men of ages between twenty-seven and forty-eight or fifty, *seri studiorum*: in the most emphatic sense of the words, wearing elaborate frock-coats in much need of brushing, and wide-awake soft felt hats of a clerical type. Their faces—but I will not attempt to describe them, suffice it to say that they were also—well, not of the most approved clerical type, but still, of a common clerical type, showing emotion only when Christianity and the Reformation were spoken of, or when Caird made a chance quotation from Scripture. Well, a set of questions had been dictated for written answers the following week, one of which was:—"What are the moral ideas expressed in the Greek "Tragedians?" One of the quartagenarians had evidently been absent when the subjects were given out, and, on the following day, asked them from one of his companions of like years to himself. When he had written the question quoted above, he slowly repeated, "Fat are ta "mōral eideeas exprist in ta Greek 'Tradeegians? Fat's "tat?" Mark the metathesis, O my friend: shade of Grimm, be present! Thus addressed, the other said as deliberately, "'Ta mōral eideeas exprist in ta Greek "'Tradeegians? Ei'm sure ei too not know." Then with sudden inspiration he immediately suggested, "I'll pe ta "name off a pook,—put you'll see." [Curtain descends to slow music.]

The Moral Philosophy room was very much crowded during my session, and the atmosphere consequently became exceedingly bad before the end of the hour. Caird did his best to improve matters by judicious manipulation of the window ventilators on either side of his platform, but still the oppressiveness was nasty, and one morning, between it and the peculiar smell from a dirty-looking Free Church student who sat beside me, I almost fainted,—had indeed to go out of the room before the close of the lecture. There were several cases of such “going-out” during the session,—many more than ever I saw in any other class. I did not care for the rush coming down from it at nine o’clock. It is on the top storey of the north-west corner of the University buildings, Logic meeting below, and Greek on the basement flat. So great was the down-rush of “Moral” men and the up-rush of Logicians at the hour mentioned that I was always afraid the balustrade of the two-abreast spiral stair would “go.” Surely some arrangement could be entered into to avoid such a possibility!

Immediately upon the close of “Moral,” most of us crossed the quadrangle to the class of Natural Philosophy. It *was* a class to which I had looked forward with pleasure, and *is* a class in which I was grievously disappointed. Let me try to expand this statement, although where and how to begin is a matter of some difficulty.

It seems to me, then, that for the number and importance of the subjects taught under “Natural Philosophy,” too little time is given. They are Dynamics, Hydrostatics, Heat,

Light, Sound, Magnetism, Electricity, and Astronomy, and to these six hours per week are given,—an hour each University day save Monday (when there is a written examination of the whole class), and an additional hour on Tuesday and Thursday. That is, eight subjects in twenty-one weeks of six hours each, or eight subjects in one hundred and twenty-six hours, or, on an average, sixteen hours to a subject. Compare this with, say the Logic Class, which meets daily at nine, and on Monday, Wednesday, and Friday at eleven,—eight hours per week to three subjects, or rather to two—Psychology and Logic. Veitch does say in the Calendar that “a portion” of each session is devoted to Rhetoric, but the portion is so small and the quality so poor that it may be quite well kept aside in my calculation. What does it show then? Twenty-one weeks of eight hours each=one hundred and sixty-eight hours, or eighty-four hours to each subject. Sixteen hours to Electricity, eighty-four to Psychology; sixteen hours to Dynamics, eighty-four to Logic! Eighty-four hours to the barbarous Past, sixteen to the living Present. Ye manufacturers of Glasgow, take note of the fact that in four years of academical training, only sixteen hours are given to Electricity and sixteen to Astronomy. But I am getting angry; I’ll endeavour to stop this train of thought.

That insufficient time is at disposal for the “Natural” was recognised, for near the beginning of the session we were informed that the work of the Chair had so increased that comparatively little instruction would be given in

Astronomy, and that those who wished to prepare for the degree had better study it in private.* It was announced too, that questions on a prescribed part of the Astronomy book would be set every week. Such a method of "*teaching*" so important a subject was manifestly absurd, and moreover, was made worse by the strange mistakes that were made. For example, a question was found in one examination paper which had not been noticed in the book prescribed for study,—Galbraith & Haughton's Manual of Astronomy. Few could answer it. A complaint was lodged with the assistants, and answer made in this wise:—"In the paper of last Monday," said the first assistant to the class, "there was a question which has been complained about. Why, it is a matter touched upon by all books on Astronomy." Chorus of "It's not in Galbraith & Haughton," and apparent discomfiture of the assistant. But rallying, he called forth the laughter and hisses of the class by coolly remarking, "Well, all I have to say is, 'So much the worse for Galbraith & Haughton.'"

Well, these eight subjects were announced for study, Sir William to take two hours at nine o'clock, B. the other two and the eleven o'clock hours. As far as I remember, it was stated in the syllabus that Sir William would take First Principles, then Sound and Light, and that B. would teach Electricity, Magnetism, Hydrostatics, and Heat, taking up Dynamics at the eleven o'clock hour. I think I am right in this statement of projected work, but it does

* There were not even sixteen hours in Astronomy then.

not affect what I have to say as to actual performance. The performance was this: Sir William began with First Principles, went on with First Principles, and concluded—almost—with First Principles; while B. began with Electricity, went on with Magnetism, and took up the first of his other subjects on the 29th of March,—three weeks from the Degree examination! I am writing just now of the nine o'clock hour; the eleven o'clock I shall notice further on.

How did this comparative neglect of the other parts of the course take place? Well, it was the result of Sir William Thomson's utter inability to teach. That is a serious thing to say, you are possibly thinking, of a man whose fame is world-wide, the high-priest of Electricity, as he has been called, the honoured of universities and scientific societies in both hemispheres. I know it is a serious thing, and I am saying it in all seriousness, with a keen appreciation of what I have lost, and what thousands besides me have lost, through this complete incapacity to communicate knowledge. That the name of Sir William Thomson is found in juxtaposition with the greatest of living scientists is what should be, and possibly in future ages he will be recognized as the equal of Galileo, of Pascal, and of Newton. Sir William Thomson as a mathematician and scientist is great; Sir William Thomson as a teacher is a failure. And I can assure you that this assertion of mine is no new thing. Years ago, when I maintained in my youth and folly that what a man knew

he could teach, Sir William Thomson was held up to me as a living contradiction of my statement; and now that I have heard with my ears, and seen with my eyes, what Sir William is, I must abrogate, annul, retract, and withdraw all that I formerly said. Whether it is from a fullness of knowledge that few men possess, from a rapid association of ideas that is rarely equalled, from that eccentric waywardness that often characterises men of genius, or again, from a constant feeling of annoyance that he is compelled to descend for a little to that which is elementary and plain, I know not; but this I know, that Sir William Thomson has little power to stick to the point,—to the subject he has set for the morning's work. He may begin, for example, with the laws of falling bodies, but ere many minutes such a word as “kinematics” comes into his mouth, and we get a fifteen minutes account of the rise and progress of that useful term, with flying biographical notices of Lushington, Macquorne Rankine, and others who had a share in introducing it. Or, again, he will entreat students to make themselves familiar with the laws of Newton, to lay them up carefully in their memories, “line upon line, precept upon precept,” as he actually told us, amid the hisses of the “unco guid.” Thus mentioning the laws, he recollects they are sometimes found in Latin, and off he goes, amid the laughter of the class, to tell of the times when only Latin was talked in Universities; when professors and students addressed each other in the language of Old Rome, “just as,” he actually said, “I

“might now be speaking to you, Mr. B——, or to you, Mr. G——, and you students to me.” This allusion to the possibility of the two assistants speaking Latin had a strong effect on the risibles of the class, the gentlemen in the back benches developing a desire to whistle. Then—all this actually happened one morning—when twenty minutes had been so spent, Sir William thought he had better “air” his views on the study of classics, and, after some lengthy preliminary remarks, declared himself wholly opposed to the foolish, time-wasting, and absurd—Sir William is as strong in adjectives as Carlyle—system of studying Greek and Latin without a key. Such an announcement from such an authority was exceedingly well-pleasing, you may be sure, to the whole 200 or 250 present, being delivered *fortissimo*, with an emphasis and feeling that was seldom displayed even in the real work of the class. The tramping, cheering, and whistling was positively deafening, one fellow on my bench actually overcoming inertia to such an extent that, while retaining a sitting posture, he jumped up and down about 12 or 15 inches from his seat, “hooraying” all the time at the top of his voice. It was a sight for gods and men. Often real work took up but twenty minutes of the hour, but on this eventful morning, so many had been the digressions, that it was eight minutes from ten when Sir William looked nervously at the clock, and made to begin anew. His glance only evoked an outburst of laughter, amid which a formula was hurriedly and incorrectly put down upon the board, and the class

dismissed. That was the worst morning of the session. Another day, after a good deal of oral examination, Sir William had occasion to refer to some bulky "transactions" on the table before him, and found to his disgust that the quantities he wanted were expressed in British units. Then there was an outburst. Coming to the exact centre of his counter, with a rush that sent his gown-tails flying a couple of yards behind, he began an attack upon what he called "the absurd, unscientific, cumbersome, "useless, and illogical system of British weights and "measures." "Gentlemen," he went on to say, "I call "upon those of you who intend to become teachers, or "professors, or manufacturers, or engineers, or members "of Parliament, or of philosophical and scientific societies, "or Cabinet Ministers,—I call upon you to pledge your- "selves to do all in your power to banish this antiquated "and ridiculous system of weights and measures, and to "introduce the metric system." And so on at great length, with gesticulations and coughs that would have served another man for a fortnight,—all amid the loud laughter of the class, which rose to simoom intensity when the future M.P.'s and Cabinet Ministers were addressed. There was no subject, it seemed, beyond Sir William's ken. Theology, German Metaphysics, the lives and works of almost every eminent man, the importance of the study of modern languages, &c., &c., all were touched upon at greater or less length. That was one way in which Sir William lost time; another was in his method

of oral questioning. He put his queries in language of so technical a sort that, in three out of four cases, the poor man under examination could do absolutely nothing but hold his tongue. Then, after two or three minutes of twisting the interrogation into a variety of forms—with much expressed impatience and disgust,—an answer would be educed from the unfortunate examinee which only further provoked the Professor. Then, as a last resource, he would break down the question to what he considered its simplest form, and wind up with “Yes or no?” delivered in tones of prodigious velocity. If the poor man fixed upon the right alternative, all was well;—Sir William would then, most likely, declare that he knew the answer all the time, but through his strange, incomprehensible, and aggravating silence, he (Sir W. Thomson) had been compelled literally to draw the reply out of him. One morning a *civis* was being treated in this way: fortunately he had selected the proper monosyllable, and then Sir William roared out: “Why “couldn’t you say so at first? Am I to be compelled “actually to draw the answer out word by word, syllable “by syllable, aye, letter by letter?” Another time the scene was both pitiable and amusing. The man called on had, undoubtedly, brains,—a distinguished man in Logic and one or two other classes, but with no great faculty for Mathematics and Natural Philosophy. He did not open his mouth while Sir William plied him with about half-a-score different forms of the question,—not capable

this time of being reduced to "Yes or No"; and, after three or four minutes, was put down with the remark: "It is extraordinary that I cannot get a logical answer to a logical question." This of a prizeman in Logic was too much: some laughed, others hissed, and the majority tramped when Sir William called on another student. But, "as a matter of historical fact," the tramping in Natural Philosophy was almost continuous,—certainly so in the back benches, where it was carefully organised. One morning Sir William had in vain demanded silence four or five times; still the tramp of wilful men was kept up with provoking and regular pertinacity, when suddenly the Professor left his counter, and rushed, two steps at a time, despite his lameness, up to the refractory benches in a hopeless endeavour to find the sinners-in-chief. I think on that morning he threatened to clear the classroom. He was a sadly-persecuted man. Once they sang "Balm of Gilead" before his very face, the back benches leading off, *tutti*, and even two or three within eight feet of Sir William filling in an excellent bass. The *tout ensemble*—as reporters say—was very fine, but highly detrimental to the opening prayer, which was not allowed to begin till quite five minutes had elapsed. A session or two before mine, a malicious rascal, on going out, had emptied into the vessel the contents of two or three different liquids, on which the Professor had been experimenting. Entering into combination, the room had been filled with a frightful stench, and next morning Sir William actually went round

the whole class, asking each individual if he were the guilty party. He never found out the man, you may be sure.

But I must reserve further remarks about Natural Philosophy for another letter.

FIFTH LETTER.

IN one of my previous communications I remarked that I had much greater difficulty now than three or four years ago in noticing what is ludicrous and absurd. I feel that I have been inoculated, so to speak, with something which has rendered me almost wholly insensible to the strange sights and sounds of University life. Much that would strike a steady-going respectable citizen as exceedingly foolish and wrong is now, I am sure, passed over by me as nothing noteworthy, if not, in fact, as an important essential in those who live, move, and have their being within academic walls. Thus it comes about that I find myself unable to give you more than a tithe of what combined to make the Natural Philosophy Class such a scene of roughness and disorder. Over and over again Sir William appealed to the "lapsed masses" before him,—sometimes in persuasive, sometimes in commanding tones; now with flattering references to previous good conduct, which, I am sure, never existed; and again in a voice that abundantly betokened anger and disgust. One morning the riot reached fever heat under his very nose—or rather above and below it, for the benches rise gradually to the back. He had been forced three or

four times, during the course of his lecture, to make a pause of several seconds, once saying absolutely nothing, at the other times speaking in some such way as I have just indicated. But now more serious interference and reproof was required. The whole class, beginning with the third or fourth bench from the front, within a few feet of the lecture table, up to the very back, where Sir William could scarcely distinguish individuals even with his glasses,—the whole class was in a violent state of excitement. What the cause was I did not exactly ascertain. One said a fellow had a small monkey in with him, another that he had a dog; but, however that may be, the commotion was prodigious, almost every individual twisting himself now to the right, now to the left, in an anxious attempt to know all about it. At last the speaker stopped, the assistants—who always sat near at the back of the table—rose to their feet, one of them fixing his eye-glass and surveying the rioters with a field-marshal-sort-of glance, and one of the most extraordinary class-homilies that ever I heard was delivered. I cannot now recollect whether it was Sir William then, or the assistant on another occasion, who began, “Gentlemen,” but immediately corrected himself, saying that they did not merit the designation. It does not much matter, however. “I have had cause,” said Sir William that morning, “to be satisfied with the behaviour of this class during the part of the session that has gone,”—a sop which at once called forth derisive laughter, followed by all the vials.

of the speaker's wrath. "But to-day," he bellowed, "I have tried in vain to proceed with the lecture; "I have called upon you several times to maintain order, "and I must now show anger"—"*anger*" he repeated in louder tones. And certainly he did. He clenched both hands, dropped his glass from his eye, set his teeth, purposely showed them set, and then, like the usher in Eugene Aram—

"—— *took six hasty strides,
As smit with sudden pain,—
Six hasty strides beyond the place,
Then slowly back again*"

to the centre of the lecture-table, the class now sitting in ominous and awe-stricken silence, save for the half-suppressed titters of some incurable laughers in the back benches. I cannot now say how the scene of that morning terminated: to me, and two or three others I spoke to, it was a most painful sight.

I have thus indicated some of the causes which conspired to bring about the undesirable state of this class. Another, undoubtedly, was the large and consequently uncontrollable number of students. The room was actually crammed from back to front,—aye, more than front, for a row of forms had been placed between the first bench and the lecture-table to accommodate the overplus, thereby making ingress and egress a matter of considerable difficulty. The occupants of the back benches were utterly beyond the surveillance of the lecturer: they were

too far from the table to follow with interest many of the experiments that were going on,—such as the more delicate movements of the electroscope and the tangent galvanometer, or to note with accuracy the working of problems on the black-board. So to occupy the hour they were thrown quite upon their own resources. *Dulce est desipere in loco* seemed to be their guiding principle while in the room. All of them combined to irritate the lecturer; all to lead off “Drink it down, drink it down,” which I have mentioned as once sung; from their quarter came the missiles of paper and other material that so provoked professor and delighted student, while one of them, for days and weeks on end, persistently read the morning’s newspaper, or rather persistently crumpled it with as much noise as possible during the whole hour. So the crowded state of the class was one harmful thing: another was what may be called its hereditary right to cause a row. Long before, when complaining of the disturbances in Junior Greek, I had been told, “O, this is “nothing; just wait till you’re in the Natural,” or, “O, “man, you should go up to the Natural some morning, “just for fun,” or again, “You must go up to see Sir “William; there are some rare ‘sets’ in his class,” &c., &c. Such remarks, bolstered and stayed by occasional visits to this academical Paradise, inspired many students with the belief that on receiving the ticket certifying them to be members of the Natural, they acquired at the same time an indubitable, distinctive and unquestioned right to raise rows, in so far as their ingenuity permitted.

So far, Sir William mainly: let me notice now the First Assistant. A gentlemanly-looking man, though with a face bêtokening no great force of character, rapid in his walk, deft in philosophical experiment, though evidently not very strong in mathematics, obliging and refined in private, but a total failure as a public teacher,—such was B., the Arnott Demonstrator in Physics in the University of Glasgow. With a well-behaved class, each member anxious to learn, B., I have no doubt, would be an excellent and painstaking teacher; but with fellows such as I have described already, charged evidently to maintain the traditional disorder of the class, and most of them caring not a single whit whether they learned or not,—with them B. was unable to succeed. Scarcely could the most interesting and—beyond Gilmorehill—the most popular experiments in Electricity command their attention, let them be performed with all possible success and skill, and woe betide the unfortunate experimenter if the slightest hitch occurred in the morning's proceedings. Had B.'s power to rule been at all in proportion to his evident skill as an experimentalist (especially noticeable in more delicate operations), all would have been well; but the want of firmness which his face showed, and his manifest incapacity to deal decisively with the more turbulent spirits of the class, only brought about a complete ignoring of the powers he really possessed as a demonstrator, and a hearty contempt of him as an administrator and teacher. There were many in the class, I know, who sympathised

cordially with him when an experiment was impaired, or wholly nullified by the unavoidable condition of the atmosphere, &c., &c. But what could *they* do amid the overpowering numbers who then burst out into groans, cheers, hisses, and occasional cat-calls? Again and again I have heard B. invite the co-operation of the few well-behaved in order to secure progress in the work of the class, but, as you can understand, they could do nothing by precept, and their good example was, of course, completely thrown away. *Longum est iter per præcepta; breve et efficax per exempla* got its first clause abundantly confirmed, and its second ironically denied in the conduct of this class. Often B. tried—if one may say so—the silent cure. The din becoming too loud for his voice to be heard, he would stop for a few minutes, during which the “most “sweet voices” would cease, one after another, but directly he began, they re-commenced, few at first, and gradually increasing in number until he stopped again. These “nodes” of perfect rest took place, in fact, only just as often as the lecturer ceased to speak. Now, you will be after asking, as Irishmen say, what the din was. Well, it was a continual buzz of conversation on every imaginable topic, broken every thirty or forty seconds by a laugh of greater or less intensity, and at more distant intervals, by a general tramping and yelling when an experiment did not succeed, when a paper pellet came dangerously near the lecturer, or when a clerical error was made upon the blackboard. A morning of ordinary

silence and attention such as is to be seen at a public scientific lecture or in a Board School-room never once was during the whole of my session ; and, of course, the awful stillness of Middle and Senior Greek has not once been observed in Natural Philosophy for years and years. One morning that I was absent, a scene both comical and painful took place. What had transpired I cannot now say, but in a lull in the hooting B. approached the centre of the table, and, with pale face and stammering accents, wondered “what their fathers would say when “they went home and told how they had been behaving.” This extraordinary remark was the topic of conversation in the class for a week afterwards, having been received, I was told, with terrific applause. I fear it did a great deal towards weakening B.’s authority. Often I heard him say, “Now, I will not go on,—I am not going to be “treated in this way. I will certainly stop.” But he went on, nevertheless, after a few minutes of rest. One day, after such a remark, he actually put down his instruments, and many of us looked for the class-room being at once cleared, but no,—

“Have you not heard it said full oft,

“That this man’s nay doth stand for nought?”

was the conviction of the majority. Their belief was not falsified : B. again began amid the ironical cheering of the “house.” It was really painful to see his nervousness on such occasions : he would stand, wiping the perspira-

tion from his hands and forehead, assuring them, with many a stammer, that he was not afraid of them, that they were no gentlemen to behave in such a way, that they were just like school-boys, &c., &c., *ad libitum*. And the crowning scene of all took place during the last lecture on Electricity. It was intended to show several forms of the electric light, and for this purpose all the window-curtains were carefully closed, in order to secure a better exhibition. No sooner was this done, and just before the current was set on, some forward spirit in the recalcitrant back benches threw a penny at the assistant. It struck him, it was supposed, on the face, for he immediately caused enough of solar light to be admitted as to make the class-room visible, and began an investigation of this admittedly extraordinary phenomenon. The look on the face of M——, the class-servant, as he picked up the coin, was inexpressibly funny. He doubtless had seen many a strange scene in Natural Philosophy, but this last was a piece of audacity which had never evidently been equalled in his experience; he looked just as if a wandering meteoric stone had crashed through on to the lecture-floor. Well, B. called on the man who threw the bronze to stand up and show himself, but, after a lengthened pause, no one appeared. Coming then to the centre of the table, the assistant raised his voice, and in tones of the acutest excitement, proclaimed that “the gentleman—“he would not say gentleman, for he was no gentleman—“who had thrown that was a coward,—he would call

“him a coward to his face, since he had not had the “manliness to rise and acknowledge his fault.” B. is by no means a stammerer, but his excusable agitation on this morning brought considerable amusement to the lighter-thoughted of the class,—amusement which deepened when a certain bench was charged as possessing the culprit. A student on this bench immediately rose, and, on his own behalf and that of his companions, disclaimed all knowledge of the act,—an occurrence which, of course, drew forth an apology from B., and many manifestations of delight at his further discomfiture.

I think I have told you enough about the class of Natural Philosophy, in so far, at any rate, as regards its appearance during the session. Perhaps from what I have said, and your own recollections, you will be able to come at the “why and wherefore” of such scenes of impropriety. To me it seems that the chief causes were the well-known inability of Sir William to teach, the large size of the class, and the manifest powerlessness of the first assistant to maintain order. The second was a man of much heavier calibre, in so far as character is concerned; but we had him only one hour a week, when the examination paper set on the previous Monday was gone over. There were not, of course, many students present on those occasions, and order, consequently, was more easily kept; but still it was undeniable that any manifestation of levity was then checked with a quickness and decision which showed abundantly that G. meant what

he said, and was a man who would not be trifled with. Comparing the two assistants, I always felt that B.'s incapacity to rule was due partly to a comfortable upbringing,—to his having always been in circumstances where the habits and customs of the masses are little known and understood, and partly to over-attention to experiment and reading. In fact, B. resembled—on a smaller scale—the late J. Stuart Mill: he knew books, but not men. G., on the other hand, evidently knew and understood the fellows he had to handle, and, though not nearly so deft at delicate experimental work as the senior, yet commanded respect by his apparently greater skill in Mathematics.

We had Sir William two hours every week during my session; but I was told by a friend that in his year they got but two visits from him before Christmas, and by another student, that in his time—twelve or thirteen years ago—they had him but once a week. A good deal of grumbling was heard about two of the text-books used: one, “Thomson & Tait's Elements,” was pronounced by almost all as unreadable, and as having been entitled “Elements” in joke; while the other, “Bottomley's Dynamics,” was condemned for having no answers to the forty or so exercises given at the end,—a first prizeman in Natural confiding to me that “it was a perfect weed of a book.” But I must say that any difficulties that were experienced in reading these or other works were cheerfully explained when explanation was asked; and it was from one or

two slight private conversations with B. that I thought he would be a patient and attractive teacher had he to deal with gentler natures,—with no hereditary row-rights to maintain.

Now, I have no doubt you will ask, “In such a class, “how are men prepared for the Degree, which is undeniably taken by a few?” I’ll try to answer. I have said already that far too little time is devoted to the work of the class when compared with that given to certain other subjects of the Arts curriculum; but, were an attempt made to use up every minute of time, and take up all the advertised subjects, some progress would be made. A friend of mine—a Normal-trained Glasgow graduate, and highly-successful teacher—thinks that, were some thoroughly good text-book on Physics gone through, so many pages daily, with typical problems worked on the black-board, advance of a satisfactory sort would be made. He is of opinion, by the way, that the class has too many teachers for its good; and, though I have not heard many say this of it, still, as you know,

“ὅχι ἀγαθὸν πολυοικισμὸς.”

Well, what is the actual course? In my session, all that we had got by the month of March was First Principles—of almost no use for the Degree,—Electricity and Magnetism, and but the veriest elements of Dynamics. Astronomy, as I have already said, was being studied by ourselves; Hydrostatics, Heat, Light, and Sound were still untouched. A friend told me that in his session

Sound was taken up on the morning that the Physics paper was set for the Degree; while I have heard that once Sir William intimated at nine o'clock that he would start and finish Heat that morning, and that all who could remain longer than ten o'clock had better do so!! In such a state of matters what did the graduands do?—graduands being here used with all the force which the Latin Gerundive is capable of bearing. Why, they went to Peter Alexander.

Peter Alexander is a highly-successful mathematical coach, doing for the University of Glasgow what extramural Knox did for Monro and Edinburgh in the days immediately preceding the *floruits* of Burke and Hare. From inquiry at several *civies*, I am informed that upwards of one-half of those who try the Degree are coached by Alexander. He charges, I am likewise told, three guineas for his course, which begins concurrently with Sir William's, and terminates at the Degree exam., thus making, with the four guineas to the latter, an aggregate of seven! I shall make no remark upon this "demnition total," as Mantalini would have said, except that Scottish students as a rule are *not* able to pay so much for so little comparative instruction. Fellows who attended P. A. did not, of course, care a single whit for what was said and done in the University,—P. A. was to them a rock and a fortress, a very present help in trouble. I understand that, making himself acquainted with the character of the questions submitted in former years, he gave his pupils a course in Trig-

onometry, Physics, Dynamics, and Astronomy, suitable in all probability to the forthcoming papers. I have called him a highly-successful coach. Certainly he was in one case; that of a man who in every one of the eight examinations in Mathematics was fourth class, in Natural Philosophy, third (but I fear in saying third I am in error,—I think he was even lower), and that man passed! Passed, too, taking the Mental Department in the same week with success! Verily, Peter, thine is the power to make the crooked straight, and the rough places plain!

One morning there had been a more serious riot than usual. Sir William, aided by G., had been gradually working up Cagniard de la Tour's siren to the pitch sounded by B. on a violin-like instrument. It was, of course, a little ludicrous to see the first assistant playing the fiddle, and had he had the mother-wit to show his own appreciation of the situation by a slight smile, all would possibly have been well. But he didn't. He maintained a prodigious gravity of countenance, drawing the bow backwards and forwards across the strings with an impressiveness that evoked most hearty shouts of laughter. Sir William, as you can understand, was so excited over the required number of vibrations that he was seemingly quite oblivious to everything else around. Well, coming downstairs that morning, I poured out my complaint to L., a P. A. man, about the time we were losing;—"You, of course, are "all right," said I. "Oh, man," he replied, "Peter puts "everything beautifully. I don't mind Sir William at all;

P.A. = Peter Alexander

“I’m putting my whole trust in Peter.” R. was another man under P. A.’s care. Coming down the eastern slope one morning that had been sadly mis-spent, one of us said to him “Are you coming back at eleven?”—meaning B.’s hour at Dynamics. “No,” snarled R., “I’ve got “enough,” with a meaning and disgust that sent all of us into fits of laughter, despite the dismal prospect for the Degree. “Oh! you should see Peter’s notes,” said P. one day to me, “the Astronomy questions in last Monday’s “paper are answered to a T.” As you know, I was not rich enough to pay P. A. three guineas, besides four to Sir William, so I had just to struggle away myself. A hint had been given me by a graduate friend not to buy “Thomson & Tait’s Elements,” so that saved a little money; and when I wanted a look at the work, which was just three or four times during the session, it was lent me by a fellow-student. Poor F. was not so well advised: he bought the book, paid 8s. for it, and sold it again to a Sauchiehall Street bookseller for 3s. 6d.,—all he could get, although declaring he had scarcely opened it. Besides, a First Honours man in Mathematics advised me to confine myself to “Blaikie” for Dynamics; and, acting on his advice, I exchanged for it the “Meditations of “Descartes,” translated by Veitch. This transaction did not cost me a penny, for I had kept the “Meditations,” with their bulky “Introduction,” as clean as possible, in view of such a contingency as an exchange. “Blaikie” I have added to my small permanent library as a

standard work. "Ganot" was lent me by a friend, and Everett's small work on Physics I purchased for about 3s. 6d. With these, a Plummer's "Astronomy," which I chanced to have, and two or three readings of Bottomley's "Dynamics," I set about work quite independently of the class, and passed the Degree with ease. My Mathematics, to be sure, had been got up prior to entering "Natural," and they did not keep me back during the session: I read hard at Ganot, Everett, and Blaikie, working in those three books about 300 or 400 examples, and often reflecting how little help I was getting from the University. Only this morning L. F. said to me that he might just as well have never seen Sir William Thomsen. My graduate friend—the teacher spoken of—affirms that he never learned anything in the Natural. Last winter an M.A. declared in the Dialectic that it should be known that Sir William cannot teach; and for my part, I avow that the Degree can be readily passed by such a course of study as I have indicated, without a single hour of attendance upon the Class of Natural Philosophy. I hope you will pardon the details concerning private study that I have just given, which, haply,

"Some forlorn and shipwrecked brother

"Seeing, shall take heart again."

I said, towards the end of my last letter, that I had looked forward with pleasure to the Natural, and that I had been disappointed. I had a liking for the Physical

Sciences, and how narrowly I escaped losing that liking in the trial it had to undergo! I joined Natural, expecting to see much confirmatory of what I had read, but how very little was afforded! Instead of bread, they gave me a stone!

The Degree Examinations came on in April as usual. I have already said something of them when treating of the Classical Pass, and will now conclude this letter by a few more details. In April, most of us were desirous of "getting through" both "Mental" and "Natural," having secured "Classical" eighteen or twenty-four months previously, and many of us had our desire gratified. Speaking generally, about sixty per cent. of those who give in their names pass the Classics, fifty per cent. the Natural, while in Mental the percentage is much higher, as a matter of course. He would be dull, indeed, who could not answer the three papers embraced under it so as to secure a pass. But sometimes there is a curious breakdown. C.G.S., who liked the Mental, was, to his surprise, "plucked," and on making enquiry as to causes, was informed by the Professor of Logic that while the rest of his papers were good, including the questions on Formal Logic, he was insufficiently acquainted with his class lectures. That month I speak of, the English Paper was of peculiar difficulty: only men who had a wide acquaintance with their native literature could possibly answer it well, and those who had carefully "crammed" the 9d. Primer (Stopford Brooke) were, for

the most part, out of the running;—nearly a dozen, it was said, did not appear at either the Logic or Moral Papers. The general opinion was that on that occasion the English Paper was the most difficult,—the Logic the easiest. The examiner in Mental did not seem a particularly agreeable fellow; “bumptious” evidently, and loving to make himself heard. He was shouting out directions as to labelling papers, pinning them together, numbering them, &c., &c., every few minutes during the first hour of examination,—at least so it seemed to us in our agitation. Students at a Degree Examination should, I think, be allowed absolute silence during the time allotted to their tasks. Our examiners in Classics and Natural showed themselves agreeable and kindly, going about their work in that quiet, fussless way which usually characterises a man who has a real command of his subject. I can assure you, however, that we were all glad when it was over, and found ourselves, a few days afterwards, *Magistri in Artibus de jure et de facto*.

“CAN SUCH THINGS BE,
 “AND OVERCOME US LIKE A SUMMER’S CLOUD,
 “WITHOUT OUR SPECIAL WONDER?”



University Pamphlets.

EDITED BY
M E D I C U S.

III.—PERSONAL EXPERIENCES.

BY
M.A. AND OTHERS.

Glasgow:
ROBERT L. HOLMES,
3 AND 5 DUNLOP STREET
1888.

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P R E F A C E.

I UNDERSTAND that my first instalment of evidence has not been without effect upon our professors. But the revelations made by the first M.A. are only the experience of a single individual. However observant he may be—however graphic in his descriptions—however earnest in his desire “to hold the mirror up to Nature,”—it is impossible for one mind to take a faultless photograph of our University. In the succeeding testimonies we have touches added to the picture which bring out other points in fuller relief, and show that what seemed harsh judgment has been too lenient, and that what was lenient ought to have been severe.

As the evidence accumulates before the reader’s mind, he will gradually form for himself a real picture of this University, and of our University system in general. He will see how gigantic are the wrongs which our students have been compelled for many years to endure, and how pressing a need there is for reform.

Hitherto Scotchmen have laboured under the delusion that our Universities were doing good work. The quality of the work is now revealed to them, and will even Professor Jebb convince them that it is good?

The last refuge of the moles and bats—the last citadel of Protection—is now being opened to the light and the fresh air of inquiry. That is the first step to reform in a country like this, where the Government advances by the popular voice and is retarded by the popular inertia. If the truth were known, men would feel it a crime to remain inert. But “gross darkness has covered the people,” and “the imagination of their hearts” has erred continually. Light—more light—is the one thing needful. To that end my young friends and I are labouring. May we yet see of the fruit of our labours!

And it is possible that the whole value of my young friends’ testimony may not be at first sight seen. I have not asked for information about what took place years ago. To that the answer might and would have been: “We put that right long ago.” I have got testimony of what is occurring now; and it is testimony won from the enemy by skill and courage—plucked, as it were, from the cannon’s mouth—and from ignorance of this we are apt to withhold the due meed of praise. Read, for example, this note from an able student whom I had asked for a contribution, and we shall better understand the danger my witnesses have willingly run:—

“On more mature consideration of your proposal, I think “it better that I should not have a finger in the indigestible “pie you are preparing for our venerable professors. You “are quite independent of them, but with me it is quite

“different. To pass my examinations in due time is a matter of vital importance. This would be difficult enough in any circumstances; and should there be any suspicion on the part of the examiners that a scoffer and a traitor to the camp lurked under the candidate’s robe, the examination would be nothing but a bitter farce.

“If this refusal cause you any disappointment, I can only plead in excuse the fact that I do not wish to run the remotest risk of incurring the enmity of the professors, for I know what havoc they can make of the interests you have most at heart; and if my conduct seems to you to partake more of the nature of cowardice than of discretion, I can only say that no outside person has any idea of the tyrannical power of the professors.”

All honour, then, to those who risk their position and success in the cause of Justice!

But I have quoted so much of this letter that I may point another moral. It may not be true that a professor would *pluck* a student from personal spite, or because he had revealed the sins of the University. Yet the students believe so, and this belief crushes the spirit of all but the very best of them. They become slavish adherents, who have no free thought of their own, who dare not exercise their own minds, lest they should disagree with their professors. The mental training given is thus a training in servility, from which the student frees himself only when he shakes from his feet and leaves behind him the dust

of this University. But the moral training is even worse than the intellectual. The students are made hypocritical sycophants instead of frank and manly critics. If they are not forced to speak, they are forced to act, falsehood. And they believe—demoralising belief!—that by ingratiating themselves into the professors' favour their demerits will be overlooked, and their degree, though undeserved, will be sure!

MEDICUS.

TESTIMONY OF FIRST M.A.

(Continued.)

SIXTH LETTER.

THE letter is a form of literature of a very uncertain sort. At the outset we can say with truth, "Where we are we know, and the way we know, but whither we are going no man knoweth;" no, not even the writer himself. As he proceeds, recollection and association are rapidly at work, and when he reaches what he thought would be the end he finds that, though he has written "at large," there is still much that he must not leave unsaid. It is thus that, instead of finishing my testimony in four letters, I find myself commencing a sixth.

BURSARS AND BURSARIES.

To begin, then, let me say something on the subject of Bursaries—a subject interesting at all times to the student mind, but more and most so at the end of his curriculum, when he has observed the lives and habits of certain of his Bursar condisciples.

Were you to speak—and I have no doubt that you have spoken—to any average extra-academical person on this matter, you would find that he possesses many ideas

which are, incontestably wrong, and to which he clings with a tenacity that you are scarcely able to relax. To him the mysteries of intra-mural life are as those of Dodona and of Delphi: every one who has spent several years within the classic walls, or, as he puts it, "been through the coalidge," is entitled to the most reverential deference: minister, doctor, lawyer—all are pundits,

αἰ διὰ λαμπροτάτου
βαινοντες ἄβρωγς αἰθέρος,

in an atmosphere to which their humbler fellow-mortals shall never be able to attain. But on the score of Bursaries he has an opinion which, though wrong, he can scarcely be blamed for holding. He imagines that connected with each of our Universities there is a system of Bursaries—some of high, some of low amount; some tenable for five or six years, others for but two or three, or possibly one, and that these are awarded by competitive examination, the best candidate obtaining the most valuable Burse. That is his belief, and a very sensible and rational belief it is. He possibly knows from some northern friend that a close approximation to such a healthy system exists in the University of Aberdeen, and it never enters into his mind that sums of University money can be given away on any other method. Just a few days ago I called upon a friend whose younger brother had recently matriculated as a *Civis Universitatis Glasguensis*. "How is O. "getting on?" said I, "does he like his work at Gilmore-

“hill?” “Like! getting on!” retorted the interrogated one, “O. is not the man to fail, I can tell you; he’s getting on “splendidly.” I had not hinted at the word failure in relation to my friend’s brother, but there must have been some supposed innuendo in my question to call out the details which followed. “Splendidly. He got a Bursary “of *£25 per annum for four years* the very first week he “was in the College”—the italicised words being delivered *staccato*, in a very loud tone of voice. Personal experience had taught me the necessity of knowing the precise Bursary prior to estimating the holder’s powers, so I said, “What Bursary is it?” “I think,” said my friend’s good lady, “I think I heard him call it a Biggart Bursary.” “Oh!” I ejaculated, “a U.P. Bursary; yes, I forgot, O. “is going to be a minister.” But the elder brother evidently was certain by this time that a serious attempt was being made to depreciate the lately-acquired honour, and he shouted out rather testily, “Well, I don’t know “what it’s called exactly, but it’s one of the University “Bursaries, and was won by open competition among the “students.” I deemed it prudent to say no more.

Now, O.’s brother was strictly correct as to the competition, which takes place at the opening of each session, and to which all students of the first year are admitted, as well as a few of the second, if not deterred by a sense of honour or the conditions of the Bursary they have in view. But the Senatus are sadly hampered in the disposing of their gifts. Not only have they to ascertain the position

of each candidate in the examination, but they have also to consider the terms upon which each separate Foundation can be held. X., for example, has obtained 70% of the possible marks in the competing examination, and Y. has scored 40%. The next Bursary in order of value chances to be, say one of the "Biggart's" before mentioned, and would be given to X. had the Senatus the power to do so. But X. cannot fulfil the essential condition of the Biggart, viz., that he shall become a minister of the U.P. Church, so the Bursary is awarded to Y., the highest on the examination list of those U.P. men who are competing. Under some such system as this the moneys are disposed of—a system provocative of much wrath and bitterness—a system which I am sure the Professors would gladly abolish if they could. By Professors themselves it has been said that one student, who had nearly five times the marks of another, got no Bursary, while to that other one was awarded.

For your information I have made an analysis of the Bursaries in the Faculty of Arts, mentioned in the recently published Calendar for 1882-83, pages 130-132, and before saying anything more upon the matter, I shall give you the condensed results:—

<i>Name and Kindred.</i>			
	Number of Bursaries.	Total value.	Page in Calendar.
Stewart, - - - -	4	<u>£60</u>	149

Local.

	Number of Bursaries.	Total value.	Page in Calendar.
Browne (Ayrshire), - - -	2	£35	135
Cowan, - - - - -	1	35	136
Duncan's (Bute), - - -	2	70	137
Ewing, James, - - - -	4	80	138
Fullarton of Overton, - -	5	50	139
Merchants' House, - - -	1	25	143
Orr, Ewing (Dumbartonshire),	16	400	146
Patrick, - - - - -	2	120	147
Perthshire Society, - - -	1	25	147
Pollock, - - - - -	3	105	148
Stirlingshire Society, - -	1	25	149

£970

Appointed by Patrons.

Adam, James, - - - -	3	£33	132
Adamson, - - - - -	1	20	132
Angus and Mearns Bene- volent Society, - - - }	2	30	132
Ayrshire Masonic, - - -	1	25	133
Brown (Saltcoats), - - -	1	12	134
Craig, - - - - -	1	25	137
Dundonald, - - - - -	8	320	138
Exchequer, - - - - -	3	30	156
Gilchrist, - - - - -	1	8	139
Hamilton, - - - - -	3	60	156
Howison, - - - - -	1	9	140
Hyndford, - - - - -	1	7	140
Leadbetter, - - - - -	1	9	141
Ross, - - - - -	1	25	148

£613

Protestants.

	Number of Bursaries.	Total value.	Page in Calendar.
Clarke, John (Mile-end), -	16	<u>£480</u>	135

U. P.

Biggart Memorial, -	10	£250	133
Brand, - - - -	3	78	134
		<u>£328</u>	

E. C.

Ramsay, Walker, - -	2	<u>£22</u>	148
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Holy Ministry.

Hannay, - - - -	3	£45	139
Lusk, - - - -	1	33	143
		<u>£78</u>	

Open.

Black, - - - -	2	£40	133
Blackquarry School, -	1	15	134
Brown, - - - -	1	7	134
Buchanan, - - - -	2	36	135
Crawford or Bishop's, -	1	15	137
Forfar, - - - -	4	80	138
Foundation, - - - -	4	40	138
Hastie, - - - -	1	20	140
Jaffrey, Jno. Ferguson, -	1	33	140
Kerr, Malcolm, - -	1	18	141
		<u>£304</u>	
Carry forward, -		£304	

Open—continued

	Number of Bursaries.	Total value.	Page in Calendar.
Brought forward,		£304	
Leyden, John, - - -	1	16	141
Lorimer, - - - -	4	172	141
MacGrouther, - - -	2	35	143
Metcalf, - - - -	4	100	144
Monteith, - - - -	3	48	161
Muir, - - - - -	2	35	144
Muir, - - - - -	2	35	144
Scott, - - - - -	2	50	148
Thomson, James, - -	1	12	149
		<hr/> £807 <hr/>	

Summary.

Given to those of a special Name and Kindred,	-	£60
" " " Locality,	- - -	970
Given to those appointed by Patrons,	- - -	613
Those given to Protestants,	- - - - -	480
" " U.P. Students,	- - - - -	328
" " E.C. Students,	- - - - -	22
Those studying with a view to the Holy Ministry,	-	78
Those open to Public Competition,	- - -	807
		<hr/> £3,358 <hr/>

That is, a total sum of £3358 shall be given away during session 1882-83 in the Faculty of Arts, of which only £807 is open without restriction to application and brains. Three-fourths are presented, one-fourth won!

But I must make a few observations upon the table which I have just presented, in order that it may be the better understood. You will observe that I have classed all the foundations under one or other of eight heads, but many of them could easily be put under several of these heads, so clogged are they with conditions. An example or two will make my meaning clear. The "Adamson Bursary" (p. 132) is appropriated to (1) a student in Philosophy, (2) son of a freeman in one of the seven Incorporate Trades of Stirling, and (3) the appointment is vested in the Convener Court of Stirling. It could therefore be classified under three different heads. Again, in the very next page, the "Ayrshire Masonic Bursary" (p. 133) is open (1) to sons of Freemasons, (2) members of an Ayrshire Masonic Lodge, (3) no candidate being eligible who is not educated or resident in Ayrshire, or (4) who is upwards of eighteen years of age—four different heads! So, to avoid "cross-division," I have classed these under "Appointed by Patrons," and have dealt similarly with similar scholarships. "Name and Kindred" refers to those funds which are available only for students of a certain surname or clan! Under "Local" are to be found Bursaries for "Students of Ayr Academy," "Natives of Bute," "Belonging to or resident in Cunningham," &c., &c., the remaining five heads speaking for themselves.

Well, what do you think of it? Without philosophising too much on what such an analysis unfolds, it is evident that it thoroughly upholds our proverbial Scottish clannish-

ness, and our devotion to religious sect. It shows abundantly, too, that while pride and piety are esteemed and enhanced, talents are set down at a discount. To obtain an Arts Bursary at the University of Glasgow it is of paramount consequence to cringe to a sporting Peer, to be the son of a tanner in a county town, to be the offspring of a certain Freemason, or to rejoice in such patronymics as Duncan, Stewart, or Simpson! It is of comparatively small importance to possess skill in Classics, Mathematics, and English! Three-fourths of the annual proceeds ennoble narrowness,—one-fourth endows power!

From what has now been said, you can see that the Senatus are almost powerless in such a state of matters. All they can do is to point out—in season and out of season—how much such conditions hamper progress,—how much, indeed, they put a premium upon ease and incapacity. How much Aberdeen has benefited by its wise arrangement of “open” bursaries is seen in many ways, but more particularly in the oft-repeated announcement — “A graduate of Aberdeen University is preferred.” Future donors have it in their power to make some approximation to the system of our Northern University; but can nothing be done to ameliorate existing arrangements? Cannot legislation step in to re-form and re-administer the endowments of those who were wise only in their generation? *Nil nisi bonum de mortuis*, but surely it is no offence to say that they, while in life, could not foresee the “changes of changing years,”—that they did not

realise the silent evolution of man and his institutions, and that what befitted the 18th might be unsuited for the 19th century. Religious sects—religions themselves are mutable and pass away; but history tells that in every civilised State knowledge such as our Universities afford has ever been prized and pursued. The desire of knowledge, the power to acquire it, the resolution to “live laborious days” in its pursuit,—such, and such alone, should be the objects of academic regard. Mere provincial pride, such as is evidenced in the two foundations I have specially noticed, should give way to a broad and catholic spirit,—to a deeper and more practical effort after justice to all, whether Scotchman or Foreigner,—whether Protestant, Papist, or Mahometan. *La carrière ouverte aux talents* should be the guiding principle of intending reformers and donors. The greatest encouragement to the greatest power—the most watchful protectorship of the *fittest* is, at the same time, wise, statesmanlike, and *natural*.

The irregularities of the present arrangements are manifold, and even the few instances which have come under my own immediate notice furnish undoubted evidence for the need of change. For some months before I entered the precincts of Gilmorchill, a maiden lady, on visiting terms with my family, had been singing the praises of one of her boarders. He was a man of nearly forty, who, seven or eight years previously, had enrolled among the Glasgow *Cives*, and was now acting as the assistant

in a Parish Church in the city. He is, I am informed, still acting in the same capacity in a provincial town—every effort to obtain a principal charge having hitherto proved unavailing. Well, in season and out of season, his domestic superioress was lauding her lodger's capacities, his scholarly powers being indicated by the oft-repeated assertion that he held a Bursary of £100 per annum for four years. "One hundred pounds a year for *four* years; O, Mr. P——'s awful clever," was the general form of her remark,—the "one" and "four" being always delivered *sforzando*, with a singular impressiveness of meaning. To me and one or two others who have since "run our "race" at Gilmorehill, there was nothing of stupendous moment in H. P.'s conversation, in his library, in his deportment, or indeed in anything that was his. "As "a matter of historical fact," he showed so much satisfaction and surprise at gifts that are in the possession of every High School boy of fifteen that we began to think that his own powers were of uncommonly low degree. So, one day my friend B. M. and I found in an old calendar that H. P. had indeed been a Bursar, not, however, of £100, but of £80, for the term of four years. But so "cabin'd, cribb'd, confin'd" by conditions was this valuable foundation, that my friend B. M. was tempted to say, with reference to himself, "that they "could not have been more ridiculous had they been to "the effect that candidates must not be less than twenty—"seven years of age, and resident at 24 Twenty-fourth

"Street." This remark may seem a joke to you, but I afterwards learned from H. P.'s intimate friend, S. S., that in the year he applied, *he was the only candidate who fulfilled the conditions of the scholarship.*

I do not require to tell you, of course, that there are Bursars who show themselves in every way worthy of the moneys they have obtained. Those are usually the competitors in the "open" examinations, and "pity 'tis" that the amounts they receive are so small in comparison with the revenues enjoyed by men whom they far outstrip in many subjects. I have not time to tell you all I have heard and seen of this latter class,—very few of whom reach distinction in any one department of University work; but I shall mention just one other case. He entered in 187—, to pass seven years in the University—four in Arts and three in Divinity—in order to qualify for the ministry of the Established Church. Possessing the necessary influence—for no examination was imposed—he applied for and obtained a place upon a foundation which has now given him a total sum of £160. So gratified was he at his good luck, that he at once made up his mind to take it easy—as he put it—in Arts, and take a five years' course. He did so, and in his fifth year was known as a third and fourth rate man in all he had undertaken, possessing the M.A. Certificate in Classics, and the reputation of having been "plucked" in Philosophy. The latter fact is undeniable, for he informed me himself. Now, I feel convinced that the

Bursary in this case did positive harm. The holder is an agreeable, obliging fellow, and undoubtedly has brains, but the award served to beget an indifference and ease, which several remarked, and one at least deplored.

Let me say something now more particularly on the *per contra* side, regarding those men who should have been noticed and encouraged from their very first year. M. B. was a man who, prior to his matriculating, had shown a sound acquaintance with Mathematics and Natural Philosophy, but never, even during his curriculum, evinced any special power in other subjects. For Mental Philosophy, indeed, he was utterly incapacitated. As the Bursary Examination at entrance comprises papers in Classics and English, as well as Mathematics, he did not score the number of marks necessary to obtain a little money. Entering, however, upon his M.A. course, he maintained his previous reputation in all the Mathematical and "Natural" Classes, but not till he had graduated with First-Class Honours did he obtain a scholarship. I recollect of him complaining bitterly to me one day of the English Essay that is required for the "Snell,"—he could not see why that condition should be imposed. Such a man, I think, should get more oversight and encouragement: his special power should be duly fostered.

C. M. was another Mathematician, taking a good place in most of his classes, but specially distinguished in Mathematics, being First Prizeman of his year in one of the classes of that department. *He* got his first and only

Bursary during the last year of his curriculum,—a few pounds being granted him on application, only because the original holder had quitted College. I need not say that that man—now a graduate—has strong views upon this University custom of forcing a man to study that for which he has no inclination, and possibly a hearty contempt.

But I need not multiply instances of men who are Classicists but not Mathematicians, Mathematicians who are not Classicists, Mental Philosophers who have no taste for either of the other departments. Such men are legion, and it is from their ranks that the best University men are obtained, and it is from their ranks that more could be obtained were our University system other than it is. The best system, I apprehend, is that which suits natural talents, and which holds out encouragement, both didactic and financial, to every one to improve the power that has been given him. As regards the latter sort of help, much could be done by a re-arrangement of those Entrance Bursaries of which I have spoken. £3358. What could such a sum do? £1100 could be assigned to each of three departments,—(1) Languages, ancient and modern; (2) Mathematics and Science; (3) Philosophy and History. It could afford in each department

5	Bursaries @	£50	=	£250
10	„ @	40	=	400
15	„ @	30	=	450
				<hr/>
				£1100
				<hr/>

That is 30 Bursaries in each department, or 90 in the Faculty of Arts, might be given each year—the smallest of which would give £10 a-year for three years. Any candidate should be at liberty to try in one or all of the departments, but no one should enjoy patronage of any sort. If such a method of dispensing the scholarship funds of the University were adopted in connection with a more modern and optional curriculum, not only would it help to raise the standard of scholarship, but it would besides save much wasted time, and obviate the evils that follow upon an organised system of patronage. In such a scheme, it is true, there is no special provision made for the poor student, in whose behoof Bursaries were first founded in our Universities. Many, who in after life rendered valuable service in their respective spheres, have begun in the most wretched poverty. Heine had for dwelling an attic, and peascods for his food. Our own Johnson, “grand old Samuel,” walked the streets of London without the money to buy a night’s bed, and not many years ago a promising student of St. Andrew’s perished from want on a common stair. What would not a Bursary have done for such men! I trust that I may never be so weak as not to see worth where it is coupled with want. In my own time, and in my own University, I have seen the wearer of a ragged coat place himself at the top in a class competition, and such men ought to be aided in an honourable way. But, in their case too, there should be an examination before deciding the

awards. There is, I am confident, sufficient public spirit in the country to provide the funds for such scholarships, and a competitive examination would satisfy the modesty of an intending Bursar, and overcome his hesitation to submit a claim as a poor candidate.

In some such way, then, as I have just indicated, the Bursary system of our University could be arranged. "The power of a nation," it has been said, "consists not in the accumulation, but in the distribution of its wealth;" and the University of Glasgow, by exerting all its energies to promote a wiser disbursement of its funds, could do much to enhance its own position as the corner-stone of our educational edifice. Page 281 of the Calendar for 1882-83 shows that the "Trust Funds for Bursaries, Scholarships, and Prizes" yield an income of £9609 13s. 4d.—nearly £10,000 per annum! Capitalised at 4%, this gives a total sum of £240,000—nearly a quarter of a million! Surely public attention should be directed to the investment and allocation of so large a sum.

ORAL EXAMINATIONS.

I can only notice very shortly one or two more of the points concerning which you have asked information. Regarding the Oral Examinations, I cannot speak with certainty as to several of my classes, and therefore prefer to leave them alone. In Middle Mathematics, however, I was called once; in Natural Philosophy once; in Logic—attended only at nine o'clock,—not at all; in English

Literature, not at all; in Moral Philosophy, not at all. The consideration given to Latin Prose *was* a farce, as you have rightly said. Professor Ramsay laid great stress upon proficiency in that subject, but many students suspected that such proficiency was not a prominent factor in deciding upon the terms of the class certificate, and certainly it obtained little encouragement in the shape of a prize. No prize was given at all in the Prose examination of Middle, and only two in Senior Latin—one to each of the first two sections of the four or five into which the huge class is divided for the purpose of teaching composition. In my year in the Senior, *the class prizes were voted away before the results of the Prose examination were announced*,—a most convenient circumstance for not a few of the prizemen. In several cases which I remember, prizes were voted to men who never had risen beyond the second class in any Prose examination, and in one or two cases, never beyond the third; the prize, in their cases, represented memory and grind, but nothing of that which admittedly constitutes Latin scholarship. I did not intend to say anything regarding this subject of Latin Prose, but the non-encouragement it receives was brought up to me the other day by a highly distinguished student. He spoke most contemptuously of his prize as a Senior Latin student, pointing out that he was but an average man of the third Prose Section of the class, far behind the best men of the first and second divisions, many of whom, he added, were more deserving of his prize.

PRIZES.

But although the defects I have just alluded to were put right, the prize system would still show many anomalies, not only in Latin, but in all the other classes. I still remember how much I was surprised on learning that the tokens of skill were assigned, not by the Professors, but by the students,—the latter voting them away each in the manner that seemed good in his own sight. The sense of justice that is possessed by most youths of between sixteen and twenty is not particularly strong, not because of a wilful desire to run against what is right, but because of a boyish and natural admiration for him who sat on the same school bench, acted as half-back in the same football match, or as bowler on the same cricket-field. All these recollections are fresh on prize-voting day, as well as reminiscences of some achievement in the Dialectic, or of a prominent position in another class. In my year, in one of the Senior classes, O. K. said to me that he had “tied” as second man with O. P., but that he feared the High School contingent in the class would vote the second prize to O. P., their school-companion and friend. He asked me to move that there should be two second prizes that session, a proposal so just that I assented, and by dint of canvassing for seconder and supporters, our point was carried on the voting day. In that same class, in that same year, I saw the result figures ignored, and a lower man got the place to which his superior was entitled. In

another class, during my curriculum, the prizes were assigned in the order shown by this table :—

					Position in	
					1st Exam.	2nd Exam.
1st Prizeman,	-	-	-	-	1	5
2nd „	-	-	-	-	1	1
3rd „	-	-	-	-	9	2
4th „	-	-	-	-	2	1
5th „	-	-	-	-	2	1

The first prizeman, although undoubtedly possessing a proper light, shone also by reflected light from another class, while the third was a prominent member of the Dialectic and of several political clubs.

Such anomalies are, I am certain, to be met with every session in most, if not in all of the classes. The respected head of the Cunard Line told, not long ago, a little episode of his collegiate career. The day that witnessed the prize-voting in the Latin Class of which he was a member was dull and foggy. Four honours had been assigned, when the Professor, wishful to relieve the general gloom, called on Mr. Burns to light the gas. Such an interlude was well-pleasing to the majority present, and when the late distinguished Professor of Humanity put the question as to who should be fifth prizeman, he was answered by the general shout of “Joannes Burns, Joannes “Burns.” “So,” concluded the great shipowner, “not for “my scholarship, but for my powers as a lamp-lighter, was “I made a Latin prizeman.” Again, a friend of mine,

who some years ago was first prizeman in Latin, Greek, and one or two other classes, was voted the fifth honour in Natural Philosophy,—greatly to his surprise, as his proficiency in, and contempt for Mathematics and the Sciences has always been matter for amusement to his friends. But enough, I need not multiply instances. Such abuses appear trivial in after life, when a man has learned that gilded books and medals are not always the proofs of scholarship, and that there are subjects of study of vastly more importance than those which our Universities afford. But to the student they are not trivial, and it is because of the heart-burning and annoyance which so frequently results that I have touched upon the matter at all. The best cure would probably be to stop the prize system altogether, and to institute a carefully graded set of class certificates in its place. Whatever be the value you place upon your prizes, whatever that I set upon mine, both of us, I am sure, prefer some other method of recognising power than the one that is at present in vogue.

DEGREE EXAMINATIONS.

I have often heard students express a desire to have an independent board of examiners for the purpose of granting degrees. They thought that the names of professors should not appear on Degree Certificates at all, and one or two have said pretty strongly that the class examinations themselves should be under outside control. I have myself often thought that our Universities might

learn a lesson from the Council of the Society of Arts, and other examining bodies in the United Kingdom. The deservedly-esteemed certificates of the Society I have mentioned are granted on the results of papers, whose writers are known to the examiners by a number alone. How different from the practice in the University of Glasgow, where every paper—in class as well as degree examinations—is headed by the full name of the writer! And thus, writing of degree examinations, I bethink myself of the various standards of proficiency which the various Universities of Scotland exact. The question is wide, for not only must the character of the paper set be considered, but also the mark that must be attained in order to secure a pass. A paper, evidently difficult, may have a low pass, and *vice versa*, thus making a comparison of the same subject in different Universities a matter of difficulty. But why should there be differences of such sort where the same degree is concerned? Surely modern notions of exactness expect an M.A. of Aberdeen to be equal to him of St. Andrew's; and certainly it is both fair and business-like to have the *same* standard in the *same* papers for the *same* degree. *Any* other system is simply wrong, confusing, and absurd. Why should Aberdeen be pre-eminent for its Classical Papers, or Glasgow for its Natural? Why should St. Andrew's suffer because of the reported easiness of its requirements, or Matthew Arnold complain of the lowness of the Classical Pass in the University of London? What is

wanted is the *same* general board for the *same* degree, assigning the *same* pass in the *same* paper to all the Universities,—that alone is right, anything else is wrong. As an example of existing things, I give you the requirements for the M.A. with First-Class Classical Honours in (1) St. Andrew's, and (2) Glasgow, and leave the subject with thankfulness and disgust.

ST. ANDREW'S.

Latin.

- Verse, - { Plautus, *Captivi*.
 - { Lucretius, Books I., II.
 - { Virgil, *Aeneid*, Books X., XI., XII.
- Prose, - - Tacitus, *Annals*, Books I., II., III.
 - Passages from Authors not prescribed.

Latin Composition.

Questions on History, Philology, and Antiquities.

Greek.

- Verse, - { Homer, *Iliad* or *Odyssey*, Six Books.
 - { Sophocles, Two Plays.
 - { Æschylus, One Play.
- Or an equal portion of Pindar.
- Prose, - { Thucydides, Two Books.
 - { Demosthenes, *De Corona*.

Or an equal amount of Plato or Aristotle. Passages from Greek Authors not prescribed. Greek Prose. Questions on Philology, History, and Literature.

GLASGOW.

Latin.

- Verse, - { Virgil, *The Georgics and Æneid*, VII.-XII.
 Horace, *The Odes and Epistles*;
 And any one of the following:—
 1. Lucretius, Four Books.
 2. Juvenal, the whole with the exception of
Satires II., VI., IX.
 3. Catullus.
- Prose, - { Cicero, *The Philippic Orations*, I.-IV.; or
 any other Orations or Epistles of equal
 length.
 Livy, any Four consecutive Books.
 Tacitus, *Annals*, Books I.-VI.

With Latin Composition, History, Antiquities. Passages from Authors not prescribed. Candidates may profess extra Books.

Greek.

- Verse, - { Homer, *Odyssey*, Books I.-XII.
 Any two of the following:—
 1. Æschylus, *Agamemnon* and *Eumenides*.
 2. Sophocles, *Œdipus Tyrannus*, *Œd. Coloneus*.
 3. Euripides, *Phænissæ*, *Iphigenia in Aulide*.
- Prose, - { Thucydides, Books III., IV., V., VI.
 Either (1) Plato—any two of the Dialogues.
Phædo, *Protagoras*, *Gorgias*, *Theætetus*;
 or (2) Aristotle's *Politics* I., II., III., or
 IV., V., VI.; or *Rhetoric*, Books I.
 and III.

Greek Composition, Questions on Grammar, Literature, History, and Antiquities.

THE LIBRARY.

In Glasgow we suffered much from the wretched state of the Library. Did you ever hear of a Library—especially a University Library—without a Catalogue? No! I'm sure you didn't. But the Library of the University of Glasgow has none,—none, at least, visible to mortal eye. In the Mitchell Library there are excellent Catalogues, in Stirling's there are Catalogues, in the Athenæum there is a Catalogue; I have beside me the Catalogue of the Library of Anderson's University, neatly printed, price, I think, one shilling to every student,—but no shilling, no accumulation of shillings, or even pounds, could purchase the Catalogue of the Library of the University of Glasgow. It is "the unknown and the unknowable," as profound a mystery as the authorship of the "Letters of Junius" or the editorship of "University Pamphlets." Over and over again I have tried to get information by putting judicious questions to the assistant librarians—obliging and courteous men, though evidently underpaid. In 187— I was informed it would be in the hands of students before twelve months elapsed. But these months elapsed, several cycles of twelve months each have elapsed, and still no Catalogue. As a humble unit in the University, I have striven to discharge my duty to fellow-units by keeping this matter of the Catalogue before the assistants. Angrily sometimes, anon jocularly, with copious references to the Dictionary of the French Academy, the Cathedral of Cologne, the Temple of Olympian Jove at Athens, and other products

of human labour that suggest an enormous accusative of duration. They did not the assistants I mean willingly sin in failing to implement their promises as to this academic Advent, and so I could not quite act the part of Gratiano towards them. But the gentle smile with which they greeted a fresh interrogation warranted me to think, if not to say—

“Now, infidel, I have thee on the hip.”

Some of my condisciples have utterly given up hope of the Catalogue ever appearing, but, “from information which has been received,” I am encouraged to believe that copies will be in students’ hands by the year 1892. While there is life, there is hope. But meantime, ye that inhabit the east of Glasgow, and ye dwellers in the coasts of Pollokshaws and Paisley, come not to the Library before enquiring by letter if it comprises the desired volume. And you, O chief-librarian, in office when that Catalogue shall have appeared, how truthfully may your epitaph read, “Opera nunc sequuntur requiescentem labores!”

UNIVERSITY GRADUATES.

I have no desire to pose as an academic Martin Marprelate. My sole object in addressing you has been to run over, as rapidly as possible, those features of University life which impress themselves most deeply on the mind of the student. He has a heavy charge to prefer against his *Alma Mater*, wherever in Scotland it may be located. At the end of, say, four years of hard work, what is the

Glasgow Master of Arts? He is, generally speaking, a man who has a fair power in reading Latin and Greek,—a power which does not extend, however, to a good translation at sight of any piece of Latin that may be presented to him, and which just enables him to con his Greek Testament.* In Latin prose he has but “moderate proficiency;” Greek he cannot write at all. No Ancient History is taught in the Classical Department, and not more than four or five historical questions are set in the Degree paper, inclusive of those upon the matter of the books read. The graduate is, of course, quite ignorant of any modern language except his own. He knows well Books I., II., III., IV., and VI. of Euclid, Algebra as far as Quadratics, and possibly the elements of Trigonometry. One M.A. I know told me that when he passed he did not answer a single trigonometrical question. Of science the average Glasgow graduate is ignorant; no Astronomy, no Geology, no Zoology, no Chemistry, not one of the subjects that are studied with such zest in our Mechanics’ Institutes, aye, even in our Board Schools,—nothing but the fringe of Natural Philosophy hurriedly and perfunctorily traversed. His English course is of but four months’ duration, supplemented by a reading of vapid and antiquated lectures in Psychology, and a short history of Philosophy. That is the average Glasgow M.A. Is he fitted educationally for life and work in the dawn of the twentieth century?

M.A. I.

* My correspondent judges by himself, and is far too favourable to the Glasgow graduate. See the evidence of “Clericus.”

TESTIMONY OF SECOND M.A.

HUMANITY.

MY DEAR —,

I remember still the anxiety I felt over the preliminary examination of the Junior Humanity Class. We had been told that, as a result of the examination, the class was to be divided into a higher and a lower section, and my one desire for several days was that I should be included in the former. I had indeed heard some strange things about this examination in previous years,—how that, for example, to the question “Decline *jus*?” one man had given the answer “*Jus, jum, ji*,” but my fear was that there would not be men enough of this stamp to constitute the lower section. Imagine, then, the satisfaction I felt when I found that even the higher division included those who could not read a sentence of Livy without one or two false quantities. Side by side with these, however, sat those who to the afterwards familiar question of Professor R., “Can you quote?” were prepared to illustrate by extracts from the poets, and I confess that within the first fortnight I had begun to wonder how the learned Professor would manage to adapt his teaching to men at so different stages. Perhaps he himself was puzzled as to how to proceed; at anyrate he

appeared to proceed on no fixed plan. He prescribed thirty lines or so of translation, and—leaving out of account the days spent in arranging the students, during which no work was done—took no more than five, so many were the difficulties that cropped up requiring lengthened explanation. This method continued all through the session, and in every branch of the work. I remember a chapter in Berkeley's *Rome* being set for a certain Monday morning, but four consecutive days were spent in elucidation and comment before Professor R. considered us fit to proceed to the next chapter.* It was when the class examinations came on in March that the defects of such a system of teaching were most apparent. During the five months only half the work prescribed had been gone over, and the students were left to do within ten days the other half. It was intimated that the latter was "voluntary" work, but we were also carefully informed that a good certificate could only be got by attempting the whole. Every student, therefore, who had regard for his honour, endeavoured to get up the voluntary work. But how was it done? Despite Professor R.'s polemic against translations, all with whom I was acquainted, and saw, made use of these as the only means of getting up so much work in so short a time. In fact, even the best students resorted for the time being to the system of "cram." I could have sympathised with Professor R.'s

* I am told, indeed, that Professor Ramsay teaches only one chapter of Miss Berkeley's *Rome* in a session.

unsystematic teaching, so difficult must it have been to meet the wants of such a heterogeneous class, had I not remembered that for almost a score of years he had had just such a class to deal with.

Professor R.'s method of teaching Latin prose to the Junior Class was certainly novel, and had the one great advantage, I observed, of not requiring him to devote a single minute to the work beyond the class hour. It implied on the part of the student an immense amount of writing, for every exercise had to be written out at least three times. No one could have objected to Professor R.'s demand for a "clean copy" each day of the previous day's exercise, had it not been that this copy was frequently found on revisal to be almost as defective as the last. His off-hand way of giving two or three possible readings—preferring this, but admitting that—left the student in doubt as to the proper reading. Not unfrequently, too, the reading which was preferred one day was only admissible the next. And so, even at the end of the second reading of the exercise, it was only possible to feel that one's translation was free from glaring mistakes.

LOGIC.

If there was want of system in the teaching of Junior Humanity, this complaint could not be urged against the Logic Class. Here method reigned supreme. Each morning the Divine blessing on the class was invoked in the same measured tones; each lecture began with the

same sentence—"At our last meeting, gentlemen, we were considering;" each day's work, in fact, resembled the other exactly,—nay, it was said that each session was an exact copy of its predecessor. The same lectures, illustrated by the same anecdotes, had been delivered in the same tone—it was a monotone—for a long series of years. Informed as we were by Professor V. that we were about to enter on the study of the science of sciences, I began vigorously the first morning to take notes. Many, I soon saw, had already a copy of the lectures, and the number increased daily till, within fourteen days, quite half the class were so furnished. This did not escape the notice of even Professor V. Stopping short in his lecture one day, he informed us that the only way to work the class properly was to take notes in the class and transcribe them at home,—students who did not do this would find out their mistake when the day of reckoning came. But yet things continued as they were, all—the Buchanan prizeman included—having evidently resolved to risk failure. For my own part, I did not succeed in getting an old copy of the lectures. Three friends who had "gone through" the class, and to whom I applied, answered me as one man—"Never had a copy of my own: borrowed them from so-and-so."

The results of the Logic examinations are interesting. The marks attainable in each examination were 400, and yet a goodly number of the class—I should think from 15 to 20 per cent.—had under 50, while not more than

30 per cent., I am sure, had over 100, or 25 per cent. The essays again—including all sizes, from the ponderous production of 100 pages to the unpretending double sheet of “note”—were divided into something like eight classes, and it was possible to reach the third of these,—or IIA as it was called,—by merely transcribing, from what was considered an imperfect copy of the lectures, what Professor V. had said on the subject under consideration. One student who had written the three essays in this manner, and who obtained, on an average, 26 per cent. in the examinations—who had, in fact, spent nine hours on the essays, and perhaps thirty on the lectures—was certified by Professor V. to have performed the work “in an intelligent manner, showing *great* diligence and *good* progress in the work of the class.” We may infer that those who made over 50 marks—or 12.5 per cent.—in the examinations “showed diligence and progress.”

ENGLISH LITERATURE.

In the English Literature Class there was less real work done, I believe, than in any other class in the Arts course. I mean that on the part of both professor and students there seemed to me to be a greater amount of shirking of the work than in any other class. Though the session only lasted four months, Professor N. did not seem to consider a fortnight spent on preliminaries as wasted time. The lectures, which were of course not new, and which were delivered so rapidly as to prevent note-taking, were

yet in the highest degree enjoyable. But then Professor N. only lectured occasionally. During my session of the class cases of discipline cropped up requiring hours of attention; hours were spent in the reading of students' fortnightly exercises; hours again on the so-called oral examination: all this during a session of some 75 hours altogether. The result was that by the end of the session Professor N. had barely entered on the special Period of English Literature which he professed to take up, and the play of Shakespeare which he intended to read critically was not touched at all. It was almost invariably a matter of speculation with the students, as they made for this afternoon class, "what he would be after to-day." Beyond the dozen or so who wrote the voluntary essays, and the few who wrote carefully only the fortnightly exercises, students contrived to pass through the English Literature with the minimum of work. Of the "fortnightly exercises" only four were taken during a session of four months, and no student had his exercise corrected more than twice. Professor N. was too ready to excuse the student who brought an imperfect exercise, or the one who brought no exercise at all. I have heard the excuse "press of work in other classes" proffered and taken repeatedly. Invariably a number came without exercises, trusting that their bench would not be called for. It was two to one in their favour, for only about a third were collected each time. Again, men have been known to absent themselves on "exercise Friday," and to

appear at the door as the class was dismissed to learn whether their bench had been "taken in." If this was unfortunately the case, they saved themselves by borrowing an exercise, copying it out, and posting it that evening to Professor N., accompanying the exercise with an excuse for absence. Till near the end of the session we were accustomed to hear men excused for one thing or another "because they had not yet got acquainted with the rules of the class."

Though there was a Junior as well as a Senior Class, as great variety in attainments was exhibited in the Senior English Literature as in any other class. Students had in most cases, it would appear, chosen the class whose hour suited them, and had made the work a secondary consideration. At anyrate, men who had carried off the honours in Classics were to be found in the Junior, studying Nichol's *Primer on Composition*—the text book of the class during the early part of the session. And in the Senior were men whom N. reproved for failing to make their nominatives agree with their verbs, and who spelt *sence* for *sense*, and talked of the English language as having during a certain period grown "*a pace*." One could not help wondering how the former felt as they read in the *Primer*, by way of preparation for the first examination, that "the term Sentence is applied to every arrangement of words expressing a complete sense;" or what the latter did when they were asked in the examination paper to translate a passage from Alfred's *Orosius*.

NATURAL PHILOSOPHY.

I entered the Natural Philosophy Class with a profound respect for the genius of Sir Wm. Thomson; but I assure you his lectures are only remembered by me now for the smart things he was wont to do and say. I don't think during the session he deliberately started and finished a single explanation. Many interesting experiments were performed by him, but they were always "by the way," and generally during the last minutes of the hour, when students were getting impatient to join their next class. Thanks to Malcolm, the class attendant, the lecture table was always filled with interesting apparatus, but these were not unfrequently on the table for weeks together, Sir W. taking all that time to reach what he had intended to take up "at the beginning of next lecture."

Mr. B. resembled Sir W. in only one point—utter inability to teach or keep order. The wit which enlivened Sir W.'s lectures (!) was altogether absent from Mr. B's. They were consequently dull in the extreme. How well I remember the hopeless confusion which attended every attempt on the part of the "Demonstrator" to demonstrate problems of even moderate difficulty. Conscious of his own failing, Mr. B. was wont to spend much time over the very elements of his subject, and to blame the mental capacity of his class for requiring him to do so. In my session, five consecutive lectures—or about one-eighth of the session of the eleven o'clock class—were devoted to

the definition and explanation of units. One was bound to conclude that his progress in the study of Dynamics depended on his comprehending that the British unit of mass was *one pound*, and that *the* unit of mass was a certain piece of platinum, &c. At anyrate, this was the burden of two lectures, and the subject of oral examination afterwards. Mr. B., "just to show us how the mathematician set about it," would at times fill the board with specimens of the *notation* used in demonstrating some apparently difficult problem. I remember on one occasion he placed before us some of the hieroglyphics of the Integral Calculus, and remarked when he had finished, "It is good to know these little bits of notation although you may not be able to use them." Some evidently thought so, for there were those who the while had been making a careful copy of what had been placed before them. Perhaps, however, they wanted a few "notes" as a guarantee that they had attended the "lecture," and certainly "these little bits of notation" were as valuable as anything else.

The 'best features of this class—the oral and written examinations—were, by the unsystematic teaching, reduced in great measure to a farce. One did not wonder that the timid student's face betrayed the terror of his soul as Sir W. called him up for oral examination,—for no previous question or lecture could possibly give him a clue to the question he was likely to be asked—that depended entirely upon what on the lecture table first met Sir W.'s eye as he laid down the ticket bearing the examinee's name.

Moreover, he was in doubt whether his examination would last five seconds, or whether he would be the gazing-stock of his class-mates for thirty minutes, during which Sir W. was making an *excursus* preliminary to a question. Sometimes the questions were childishly simple, and the incongruity appeared when these were put to what were known to be the best mathematical men of the class. I remember five or six men in succession failing to answer a question on the "relation between the sides of a triangle and the sines of the opposite angles." Sir W. at last fixed on a well-known prizeman in Senior Mathematics, and gave vent to expressions of satisfaction on getting the correct answer. It was no doubt recorded on the prizeman's certificate "that he showed preparation when examined orally."

The written examinations covered a wide field, but students who wished to do well could not depend on the lectures for their answers. They had to note everything that had been even mentioned in the class, and read up the subject at home. This implied extensive but unsystematic reading, as well as the possession of a vast number of text books. Great things were not, however, expected of us in these examinations. Both Sir W. and Mr. B. have said repeatedly that the student who answered three or four out of the ten questions might rest satisfied. Take into account the fact that almost every paper contained three or four questions requiring only description of elementary apparatus, or an account of a simple experi-

ment, that even the last—that is, the 17th or 18th—paper required us to “define temperature,” or “explain the electrophorus,” and you can imagine the knowledge of Natural Philosophy a man required in order to “rest satisfied.”

M.A. II.

TESTIMONY OF FIRST UNDER-GRADUATE.

MY DEAR —,

You ask me for some reminiscences of the scenes through which I passed during those ever-to-be-remembered four years of instruction in Arts. Many of those scenes were pleasant and enjoyable. Many were painful and unseemly. The former class were witnessed with evident relish by both professors and students. They were felt to be a salutary break in what otherwise would have been a monotonous perpetual strain,—such a strain as influences not altogether for good either the bodily or the mental health. Sometimes those scenes were originated by the smartness or stupidity of the students; not unfrequently by the wit and good nature of the professor. I would remark here in passing that a mother wit capable of adapting itself, in an agreeable manner, to all circumstances, and a nature good enough to allow that wit “to have her perfect work,” are most desirable possessions in a professor. Unaided by these possessions, his work is proportionately less successful. I do not call wit and good nature qualifications of a professor; for I have sat at the feet of some who had neither the one nor the other. But at what a disadvantage such men stand when set

alongside of your good-natured professor. The class of the latter is a most enjoyable one. A little scene is occurring periodically in which the *great man*, to use a popular metaphor, comes out of his shell. He drops for a moment his academic dignity, and appears to the students as a member with themselves of the human family—bone of their bone and flesh of their flesh. I might mention to you, as types of the good-natured, witty professor, Professors Ramsay and Nichol. These men are almost universal favourites. It is in their classes that the enjoyable scenes occur. The students feel at home with them. I say nothing here regarding their modes of instruction, or the instruction itself. My object is to point to an evil that exists in our modern University which could not have existed in the institution of less modern times. The evil to which I refer is the possibility of a man's existing as a professor, and enjoying the emoluments connected with such a post, while between him and those whom he instructs there does not exist, to all outward appearance, the smallest atom of sympathy. I am prepared to speak rather strongly on this point, because I think it a real evil. A professor who systematically ignores the existence of students as individuals, and who is seemingly only prepared to be civil to them as a collective body, exercises an educative influence upon very many which does not always bear good fruit. Those who do not see the exceeding folly of such conduct are apt to go out of college and practise the same tactics in the sphere of life in which they may

be called to move. Now, in an institution such as a University, it should be rendered impossible for a man to have an educative influence of such a kind. A professor ought to know more of his students as individuals. If he condemn them he should not be a professor, and if he have any interest in them he should show it. He should not be allowed to act towards his students as those who sway the fortunes of mercantile institutions sometimes act towards their employees. The relations between professor and student, and between master and servant, are of a very different kind. But lest I weary you, I must give you an illustration of what I mean.

Professor Jebb's reputation as a scholar is, without exaggeration, world-wide. As a conscientious, painstaking teacher, it would be difficult to find his equal. In his class there is perhaps more honest work done than in any other in the University. Students who have had private conversations with him tell me that he is most courteous and obliging. This is all true; and yet the Greek classes, on account of the idiosyncrasies of the Professor, are perhaps, to the students, the least enjoyable of all the classes of the Arts course. Jebb leaves his house in the morning, and walks with smart, elastic step to his class-room. He keeps his eye rigidly fixed on the ground all the way, even when passing through the group of youths who congregate around his class-room door. Here's a new man. He meets Jebb "right in the teeth," and thinks it proper to lift his hat. But Jebb heeds him not. He acknowledges

not such civilities from individuals, for whom, to all outward seeming, he entertains only feelings of contempt. Let us enter the class-room. There sit about 200 youths in fidgets, each hoping that he may not be called on to go over the lesson for the day. Presently Jebb steps upon the rostrum as trim as a new pin. The work of the class begins. "Gentleman" after "gentleman" is called up, and I believe that even the best of them does not get up without a certain degree of nervousness. For Jebb does not seem to have any sympathy for those youths to whom he stands in such a position of conscious superiority. The fellows are frightened for him, and he knows it. Great are his powers of sarcasm. A single word, it may be even no more than a look, is sufficient, in most cases, to shrivel up the intellectual bud which for the time being is under his inspection. If the class smiles at any incident either in the text or the translation of it, such ungentlemanly conduct is immediately checked by the rolling of his dark eye, or the upheaval of his nervous arm. A loud laugh is followed by a most unseemly display of dignified wrath. On such an occasion he would ask, in a most excited manner, "Is such conduct worthy of this University?" But I need not enlarge on this point. I shall simply add that between Professor Jebb and his students there seems to be a great gulf irrevocably fixed. There seems to be no fellow-feeling between him and those striplings, who, from no fault of their own, are compelled to listen to his disquisitions. I make bold to say that

during his usual three hours' daily lecturing he never looks one of his students full in the face. I remember once seeing him shove a fellow off his platform. 'This fellow had wanted to say something to Jebb, and in order to do so had presumed to place himself on a position of local equality; but Jebb performed the above operation with not the best of grace, and forced the fellow to make his remarks "out of the depths." Jebb ought to remember that he is not a more gifted man nor a more successful teacher than his predecessors in the Greek Chair. During the seven years he has held office, only the very small average of one man per session has taken first-class honours in classical literature. Moreover, scholarship does not exempt a man in his position from the duty of exercising kindly acts towards his students. With a little more fellow-feeling, a little more frankness, a little less stuck-upishness, Jebb would be the most popular professor in Gilmorehill.*

I am well aware that neither Jebb nor any other professor in his present circumstances could attain such a degree of intimacy with his students as would make that intimacy helpful to them. Such a thing is impossible at Gilmorehill, where there are so many students. Without such an intimacy, without a certain amount of attention being bestowed to individual difficulties, the teaching is not what

* What a satire this is upon a letter Professor Jebb sent to the *Glasgow Herald* in January, 1882, in which he boasted of "a certain electric sympathy felt by every member of a large class." The sympathy in the case of his large class is apparently that of repulsion and not attraction.

it might be; very far indeed from what it ought to be. The teaching in the University is to the mass. Individual difficulties are, with rare exceptions, left unsolved. I myself have often felt difficulties which have not been dealt with by the professor, and mine, I believe, is not an exceptional case.

What, then, would you recommend? What modifications in the institution of our Universities must be made, so that a much-needed attention shall be devoted to every individual student? In this respect, most assuredly, there is "something rotten in the state of Denmark." To me it has long seemed that the foundation of several tutorships, each tutor having under his supervision a limited number of students, would make a University training a thing of value, and not, as it is at present to so many, a mere sham. Where have the funds to come from? Cut, say, £500 a year off the salaries of Jebb, Ramsay, and Jack. This would leave them still with large incomes. The University would have £1500 annually with which it could employ seven first-class men with about £200 a year each. But I am afraid I have written at too great length. You can easily enough elucidate for yourself this scheme of mine. The advantages, in the interests of scholarship, which its inauguration would effect are very apparent. The state of things I complain of above are, to my mind, "the head and front" of the offending of our present University system. This rectified, and an alternative Arts course

instituted, I believe that our Universities will yet do, what they at present greatly fail to do—raise men who shall, in the truest sense, be “lights in the world.”

UNDERGRADUATE I.

As a postscript to this letter I add an extract from a letter sent by the same writer on receipt of Pamphlet II.

“The pamphlet gives the *profanum vulgus* an opportunity
 “of peeping behind the scenes, a recreation in which it
 “never shows itself slow to indulge. Peeping behind the
 “scenes is very often a reprehensible employment, but I
 “cannot look upon it as such in this instance. If the
 “general public take advantage of the opportunity you
 “have afforded them the effect upon their minds must be
 “of a salutary nature. It contains a lesson the popular
 “mind is sadly in need of learning—the lesson that some-
 “thing more should be looked for in a man than a
 “University training or a University degree as a ground
 “for showering on him respect and patronage.

“I think you are hardly fair to Veitch. How do you
 “not object in the same way to Jack, going over, year
 “after year, the same propositions in Euclid, or to Jebb
 “reading the second book of Xenophon every year in
 “his Middle Greek? * Allow me further to inform you

* The objection to Professor Veitch is not that he goes over the same course every year, but that he does not use a *text-book*. He makes his students write his lectures, as if the printing press was unknown. Professors Jack and Jebb use text-books.

“that there is precious little change in Caird’s lectures year after year; * and as for Nichol, he told us, when I was in his class, that he had taken the trouble to write out all his lectures in such a legible hand that they could be read by any one he might appoint, in the event of his finding it inconvenient to be present himself, which was not infrequent. When he was absent he sent to read his legibly written lectures an impertinent youth, whose characteristics, perhaps, Nichol did not know, but the prevailing opinion was that his presence in the rostrum was an insult to the class.”

* This is apparently true, and copies of Professor Caird’s lectures have even been printed from notes taken by students. Professor Caird objected to this, and caused the publisher to discontinue the sale.

TESTIMONY OF CLERICUS.

THE MANSE, *January*, 1883.

MY DEAR —,

You ask me, as a member of Presbytery, and as a member for several years of one of the Committees of the Church of Scotland for the Examination of Entrants to the Divinity Hall, to relate some experiences of their educational condition and acquirements at that point. And although I do so with considerable reluctance, and not without reserve, yet I believe so thoroughly in the purity and nobility of your aims as Editor of these University Pamphlets, that I must comply with your request.

I am not quite sure, indeed, that it is possible for me to sympathise with you in all your views, or in the, perhaps, too thorough statement of them; but there cannot be two opinions with respect to the importance of inquiring how far the Universities are successful in the work they profess to do, and whether, if not successful, means can be devised for utilising, to greater public benefit, their large and increasing resources.

You have set yourself, therefore, to a great task, and I wish you well through with it. The smaller task, rather, is now mine to report to you from observation what examiners find in candidates for entrance upon Divinity Classes.

“Our Presbyterian Churches,” you justly remark (Pamphlet I., p. 42), “require the students who enter their Divinity Halls to produce proofs of learning from the University, though they do not require them to possess the degree.” It ought, however, to be added here that they do what in them lies to encourage the students to take the degree.

And in the case of those coming before the committees of the Church of Scotland, this encouragement takes the form of relief from examination upon the subjects represented in diploma or departmental certificates.* These are the seven subjects upon whose fruitfulness in money equivalent you are so healthily scornful. I believe, too, that the feeling grows on the part of all who have had to do the Church’s work in this department, that the possession of the degree ought really to be a *sine quâ non*, especially since it has been found to be at times a very poor voucher for the scholarship of the holder. I have at present no figures beside me by which to show the proportion of graduates and non-graduates who have of late presented themselves, but I believe that that of graduates is on the whole increasing, though, in respect of the Glasgow centre, we have to say

* This is also the case with entrants to the Divinity Halls of the Free and United Presbyterian Churches.

that *there* the number of the nons always vastly preponderates. But surely one might expect that the graduates would make excellent appearances before the Committees, seeing that they wear the title M.A., and, moreover, have only two subjects on hand,* viz.:—as in the programme of the past year—Hebrew: Regular Verb and Pronoun; and New Testament Greek: The Epistles to the Galatians, and to the Colossians.

I do not, however, and cannot speak of this year, or of any particular year, for reasons obvious enough; but, taking a “conjunct view” of years, during which it has fallen to me to have opportunities of personal knowledge, there have been too many instances in which a mere pass in Greek was achieved by those possessed of the M.A. degree, and that mainly because of egregious blunders in the declension of nouns, and in the conjugation of verbs, common to Xenophon and St. Paul.† All honour, of course, to those faithful few who attained on similar papers their eighty and ninety per cent.; and no doubt to them must the Church look hereafter for upholding any little credit that belongs to her for accurate knowledge and intelligent criticism of the Scriptures.

But in the case of those to whom I have been referring—if only it were possible to reproduce some of their answers

* And therefore only *two* to specially prepare.

† In a former letter to me Clericus wrote almost in the same strain: “It is surprising to find year after year that some of the graduates make poor appearances, ‘failing exactly in the same points as the others who have not graduated, and ‘reaching a percentage at times little above the mere pass of from thirty to forty ‘out of a hundred.”

to questions fair and reasonable—the words which you use in reference to the M.A. degree (Pamphlet I., p. 37: “It “indicates about the same level of education as that possessed by a boy leaving a good Grammar School”), would be proved to everyone to be wholly unwarranted, and altogether unjust to Grammar Schools worthy of the name, even though not *good*. You will not wonder, therefore, to learn that the plucking of an M.A. in this entrance exam. has more than once taken place.

I see that a sentence or two before the one just referred to, you state very much as if it were an axiom—“Every “student who can will take the M.A. degree;” and there are now reasons for the ambition to possess it which did not exist in my day. But I believe that many students going forward to divinity are not in a position to accomplish all the departments before seeking through Presbytery and Committee to enter the Hall. And this circumstance being borne in mind, it follows that, of the non-graduates who are examined upon all the subjects qualifying for the degree, a few faithful and originally *well-grounded* ones are found to excel. They gain, say, from sixty to eighty per cent. over all, and the Examiners have pleasure in such success, because rejoicing in the prospect of the Church’s prosperity under thoroughly equipped ministers. The larger number, however, have too often fallen far short of such percentage, while some have entirely failed to satisfy the lowest requirements. The additional Greek here, you will note, has been from year to year one book of the *Anabasis*, or of

the *Memorabilia*; and in Latin a book of the *De Officiis* along with a book of Virgil has been set. If you share with me, then, the opinion that correct knowledge of, good acquaintance with, and delight in the characteristics of these two languages are the best guarantee for culture, and the best helps to excellence of thought and speech, you will regret with me their almost entire non-existence on the part of some to whom Universities have given certificates, and whom committees must take in hand to their great discomfort. What, accordingly, has happened from year to year? Why, that the "Grammar School boy" could not for the life of him be guilty of errors so enormous as have been made! The ignorance of nouns and verbs displayed has been simply incredible. The versions of easy sentences into Latin, and the translations of both Greek and Latin into the vernacular, "pure and undefiled," have proved the veriest marvels.*

It has even been occasionally doubted by some of the Examiners whether they were right in going on to take the papers of such non-scholars, but of course their whole possible appearances had to be gone through and summed up. At this point, however, and without attempting to give any account of the quite as wonderful results in other fields of examination, I may try for a little to deal with the question you will naturally put to me—How do you account for such

* It is to be remembered that while only some of these entrants to Divinity are Masters of Arts, they have *all* spent four years in the Arts Classes! They are, in short, the completed product of our Scottish Arts course!

an unsatisfactory state of things in connection with the languages? This very question was indeed put to me some time ago by one who, in his intercourse with many students of Divinity, had been astonished and grieved at the miserable account they could give of the simplest passage in their Greek Testament. And my reply in substance was that there must be a want of thoroughness somewhere, or, perhaps, everywhere, in requiring grammatical knowledge and accuracy. I wondered at the same time whether or not the professors were now, like my old one, careful to insist upon step-by-step completeness of knowledge: for it is undeniable that, unless you lay the foundation with painstaking care, the superstructure cannot abide.

You will hear it argued, indeed, that scholars like those who occupy the chairs in all the Universities can hardly be expected to condescend to such work. But the obvious retort is—why, then, do they accept pay for it? or what business have they to continue occupying the schoolmaster's place at more than he would ask without doing his work at all so well? I must leave you, however, to dispose of such knotty points. What I feel constrained to emphasise is, that in what ways soever the wrong is to be put right, the Universities are at present falling short of their true work and purpose, because failing to provide, in sufficient abundance for the Church's needs and for the world's enlightenment, young men scholarly enough and accomplished enough in the use of the originals of theology and theological science. How curious and interesting, if not also somewhat hu-

miliating, to note that many a lady graduate from Girton would be more than a match in N.T. Greek for the students I have spoken of, although certificated seven-fold ! *

CLERICUS.

* Very strange and sad it is that a man should undertake to expound a book he is unable to read, but simply intolerable that a University should turn out such men as its "completed products!"

A CRY FROM THE MEDICAL CLASSES.

“DE PROFUNDIS.”

WHO has not heard of the renowned Professor Young? Yet although his name is familiar to every student in the University, not one of them has ever seen a copy of his lectures, or even very meagre notes of them. Indeed, the learned Professor himself tells you that no one need try to take down *his* lectures.

And this is a fact most sadly true. It is one instance of the evils of Crown appointments. The story goes that Dr. Young was travelling in some official position on behalf of natural science, and that, through some mishap, he injured his foot. The Government, afraid of an action for heavy damages, and as a slight solatium for the injury received, appointed Dr. Young to the then vacant Chair of Natural History in this University.* And here he is to this day, lecturing and smoking a clay pipe by turns.

* I fear this is a cock-and-bull story, but as it is not impossible, and illustrates the haphazard mode—whatever the mode may be—in which our Professors are appointed, it may be allowed to pass.

Here, under his excellent tuition, the student has to sit one hour daily throughout the winter session, without drawing one molecule of information from the lectures, his knowledge of natural history being gained solely from the pages of Nicholson. The class examinations are a farce, and the certificates a great joke. It is said that one year there were in his class two students of the name of Smith, William and John. William was a swell. John was William's antithesis. At the end of the session John went for his class ticket and certificate. Dr. Young looked at the fellow and then at the certificate, and finally said, "You're John! I always thought that you were William. I've given you a first-class certificate, but I meant it for the other Smith."

Such tales may not be true to any great extent, but the very fact of their existence and currency among the students, proves that there is at least some dissatisfaction regarding this Chair.

Let us see if this is the case with any other Crown appointment. We have not far to seek. Some time ago the Chair of *Materia Medica* became vacant by the resignation of Dr. Cowan. A number of gentlemen entered their names as candidates, among whom we may mention Drs. Finlayson and Tennant, men of known talent and integrity, capable of not only fulfilling their duties in an able manner, but also of shedding a lustre on this branch of medical science, and even of resuscitating the now fading glory of the Glasgow Medical School.

What was done? External influence was brought to bear upon the granting-body, with the result that Dr. Matthew Charteris, a gentleman of unlimited good nature, but not possessed of one of the qualifications which go to make a successful teacher, received the appointment, and thus the students are forced to spend an hour daily throughout the winter, listening to a few disconnected fragments which any one could read for himself in the course of a few days.

The Class meets at twelve; Dr. Charteris commences lecture about ten minutes past, and finishes not later than the quarter to one o'clock, thus lecturing for about thirty-five minutes. On the back of this fact put the other, that his arduous duties as Professor necessitate his giving his class a holiday about once every fortnight. No notes are taken. All that Professor C. says is to be had in the text book from which he gets his information, and in much more concise language; and yet this is one of the classes we are compelled to attend, in order to qualify for a degree. We are literally forced to throw our money and our time away; but we have this slight consolation, that the roll is seldom called, and when it is, no person is marked absent. Our preceptor tacitly acknowledging his inability to lecture, by thus allowing the students the opportunity of escaping from the tedium of his lecture room. One very good notable anecdote of Dr. Charteris is worth repeating:—"Shortly after his appointment to the chair, some eager

“brother found that he was at that time taking a course of lessons (in the East End) on the manufacture of drugs, pills, &c., an interesting branch of therapeutical science which he seems, previous to this time, to have altogether neglected.” And I have myself, within the last few months, met an English Physician of eminence who attended with Dr. Charteris at Edinburgh, and who informed me that there was no more unpromising youth in his year than Matthew Charteris. I could hardly get him to believe that Dr. Charteris was really Professor of *Materia Medica*. He leant back in his chair, completely convulsed with laughter. It should be mentioned that Dr. Charteris has fallen in with an able and capable assistant—I refer to Dr. Napier.

These are only the two first instances which have occurred to me; they are by no means the exception. In most other cases the gentlemen are thoroughly qualified, as far as knowledge goes, but unfortunately have not that fluency of diction and lucidity so necessary in a teacher.

Among this class I might mention Dr. Cleland, than whom no better man could be found, but he lacks the power of imparting his knowledge to the student in an intelligible manner, and yet his books are among the most readable of all scientific volumes with which we are acquainted. His modest and bashful assistant is another of this class. His words flow from his mouth

in one incessant stream; he never repeats a sentence; he delivers his lecture pretty much in the way a boy reads his lesson, and walks out the instant he finishes.

Then take the admirable Professor of Physiology, Dr. M'Kendrick. He professes to teach Physiology. But does he do this? We think he does not in the manner in which he ought. He lectures with considerable fluency no doubt; but he occupies the time in describing physiological method and apparatus, rather than Physiology itself. Then his assistant, Dr. R., who is perhaps the most deservedly unpopular man in the University! How great and extensive Mr. R.'s scientific knowledge may be, we know not; but this we do know, that he is not fitted for a lecturer.

Then we come to Dr. Gairdner, of whom the Principal has said that he is fit to occupy any chair in the University. Dr. Gairdner is perhaps the most diffuse lecturer one could wish to hear; long quotations from Shakespeare, and all the classic authors, good jokes, aphorisms, *bon mots*, religious dissertations, with a touch of medicine, make up the lecture.

It is needless to multiply instances. Enough has been said to show that the lecturing staff of this department is not efficient. Nothing could be more absurd than these Professors expecting students to come up for examination thoroughly prepared, when they (the Professors) have utterly failed in their teaching. If gentlemen do pass their examination, no thanks are due to the Professors; all credit is

to be given to the various text books prescribed to be read (Dr. M'Kendrick's *Physiology* excepted). In fact, the Professors might, for any good they do, be away altogether; they act more as a hindrance, by forcing students to attend their classes, and then not being able to teach their class when they have got it formed.

We have given two instances of the result of Crown appointments as helping to demoralize the University. Let us now look a little closer into this matter.

The appointing body are men with no interest whatever in the University, as it is of no moment to them who teaches. When a class becomes vacant, therefore, the natural result is, that any influence that can place one individual above the others will generally affect the "Crown," who, having no interest of their own to serve (unless party), and being willing to oblige a friend, generally appoint the person of whom they know most, irrespective of his real merits as a teacher. Thus it is that such men as Dr. Charteris come to be Professors.

The results of this are easily seen. (1) The Professor is unable to lecture. (2) The students become listless and fidgety, and shun the class as they would the plague. Then at examinations they are not well up—they manage to pass by the skin of their teeth, or, perhaps, get plucked. The Professor wonders at the small percentage of men who have gained high marks, and sets them down as a set of even duller blockheads than their predecessors.

The Professor continues on his easy way unmolested; but the student passes out into the world and finds he is not so well educated as some others who have got no Degree. He tries to read, but the pressure of business is too much, and so he passes on with a mere smattering of knowledge, of which, had he been properly taught, he would have had a great store.

And who is to blame for this state of affairs? Most certainly the Professors, and the restrictions which are laid on the students.

The student should not be forced to attend any set course of lectures. He should have his choice, and should be free to attend the classes of the best men—even though extra-mural. The University should be only an examining body, or the classes should not be compulsory.

The present system is the ruin of many men, because the world overvalues a Degree enormously (not knowing what it is worth), and men must take a Degree in order to rank properly in the eyes of the people. The time occupied is four years almost wasted. Little or nothing is learned from such courses as are prescribed in the Glasgow University—nothing that will be of any use to men who have the world to face,—men whose lives depend on the amount of practical knowledge they possess more than on all the legends and fables of ancient Greece and Rome. This is the age of utility; men must be practical, or they must go to the wall. It is

a stern fact, but, nevertheless, it is a true one, and there is no alternative.

We must progress in this nineteenth century; life is too short to waste on trifles and the great nothings on which our forefathers laid so much stress—

“Life is real, Life is earnest.”

The four years thus forcibly wrested from us might be profitably spent in preparing ourselves for the great battle, instead of which we have our time occupied by a congeries of little nothings, and we make our exit from the College with an M.A. or M.B. tacked on to the end of our names—the richer to that extent only, but infinitely poorer in regard to real knowledge than many heterodox beings who have followed their own sweet will in the matter of education.

The Professors don't care how they teach (if it is teaching). They saunter along, their hands behind their backs, as careless as schoolboys. When a man has secured his competence for life he can afford, if he chooses, to pass the remainder of his earthly sojourn in a state of chronic lethargy; but with the average student the case is entirely different. He comes up to College but with a very indistinct idea of what it means. He pictures to himself a beautiful vision of a tree of knowledge, of which he may eat at pleasure; but a month or two shows him the fallacy of his ideas. He very soon sees that the Professors take no interest in their

work—he sees, too, that they care not whether he works or no; they have received their money, and henceforward the student ceases to have any attraction for them. The student becomes downhearted, and loses interest in his studies; acquires idle habits, but manages to get his Degree, and leaves his “Alma Mater” a “sadder and a wiser man.”

To the great majority of the students who attend the classes it is a great struggle to bring themselves through the College, and with what feelings of regret—may I even say disgust—will they look back upon these four years so miserably misspent—the years of budding manhood, when talent begins to show itself, and when we are best prepared to receive information and acquire habits of study.

It is a disgrace—nay, I would even go further, I would say it is a crime—that the University system should be allowed to stand as it is at present, unchanged merely because it would inconvenience a few men and throw them off the State, and make them depend on themselves.

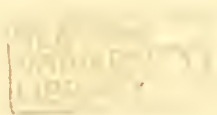
How long will the day delay when all these old abuses, and that most cursed “use and wont,” will be done away—when the student will approach the footstool of learning with confidence, and not with fear and trembling? We are no mere revolutionists, trying to pull down ancient institutions because they are ancient; we try to pull them down because better can be erected in their place.

Why should we be compelled to attend any class?

Degrees are a monopoly in the hands of a few, who, by their actions, have shown themselves to be unworthy the confidence placed in them. When monopolies in other things are done away, why should this one stand alone? Let it be swept away in the wave of progress and enlightenment which is spreading over the land; let not a vestige of this great systematic monopoly remain.

Every day we see supporters rising in hitherto unsuspected quarters; the lists are swelling, for the cause is just. Let us gird on our armour, and may we not lay down our pens till this great blot on national enlightenment is swept away from out the land; and we may rest assured of success, for in their weakness lies our strength.

FIRST MEDICAL UNDERGRADUATE.



University Pamphlets.

IV.—CONSIDERATIONS BY THE WAY.

BY

THE EDITOR.

Glasgow:
ROBERT L. HOLMES,
3 AND 5 DUNLOP STREET.
1883.

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ADDRESS TO THE READER.

“ANOTHER PAMPHLET!”—Yes, reader, and not yet the last. But take courage, we are near the end. One Pamphlet more, or at most two, and our present voyage will be over.

It has not been pleasant. Too many reefs and quicksands—too many ugly seas and threatening breakers have beset our course, and I fear my piloting is not the most skilful.

But we are soon to enter smoother water, beyond those growths and silted deposits of Time, and these rough contests of the Present with the Past. For us “the Future holds in it” the promise of better things. Towards it we press forward with the hope, though as yet not with the certainty, that the promise will be fulfilled.

MEDICUS.

March, 1883.

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THE MODERN IDEA OF EDUCATION

*"The thoughts of men are widened
"With the process of the suns."*

WHEN our University was founded, learning was a definite quantity, and one fairly within the reach of ordinary powers. Certain subjects were alone considered to constitute learning. All other subjects were too mean to occupy the attention of educated men. Thus no one, in those days, could have talked of a Science of Agriculture. Agriculture was left to the stumbling haphazard of unlettered slaves. Education was divorced from the common life of men, and he who had acquired learning was by that fact raised to a lofty eminence, often, indeed, to a "bad eminence"—a superior power of making the worse appear the better reason.

Learning was thus a property, like an estate or a kingdom, or wealth in some other form, and was the aim of ambitious younger sons, who sought, in some learned and usually priestly office, the means of equalling or surpassing in power their eldest brothers. To more noble and unselfish minds it presented itself as the means of teaching men the way of life, of translating, for the common benefit, the divine teachings that had been given in other lands. Yet another class of minds were allured by the phantom of

a supernatural power, which they dreamed that learning gave. To all, however—to the sorcerer, to the Christian priest, and to the ambitious cardinal alike,—the word learning had one well-understood, undoubtful meaning.

But what do *we* mean by learning? Is Owen, or Darwin, or Huxley a learned man? Is Tyndall or Herschell? Or are none learned but the countless devotees of classical antiquity? We cannot answer.

The word Learning has ceased to be of undoubtful meaning, and a new word has arisen to indicate the wants of this new time. Men no longer attempt to compass the infinite fields into which human research has ploughed its way. Each one is content to master some little corner of the vast expanse; but all desire what is called Culture.

This is the idea that underlies our modern education—an idea that could not arise in those times when the process of education was a simple one, and the content of learning a fixed quantity. What is it?

A man is born, not made. A man grows. He grows, like a flower or a tree, by the energies inherent in his own nature, and the error of all educational systems of past times consisted in supposing that he ought to grow after a fixed pattern, and in a certain mould. The idea of culture is the antagonist of this. An education must develop the man. If it impose upon him a direction alien to his nature—if it endeavour to make the rose tree put forth apple blossom—it will spoil him. Yet this is what our Universities persist in doing. The perfection of the present

University system would be the production of yearly parcels of men all rolled according to a certain pattern, and labelled M.A. But this is a barbarous system that can never any more attain perfection, but must, with every advance of mankind, become more imperfect so long as it exists. So long as it exists, which, thank Heaven, cannot now be long !

The only sphere where, as yet, a serious attempt has been made to introduce the idea of culture into practice is at the very beginning of education. Here, with all its too often childish sentimentality, the Kindergarten system has for some years been making an honest attempt at child-culture. But in order that that system may attain any adequate degree of perfection, the idea of culture must be introduced into all places of education. The mechanical drill of our schools must give place to a training as loving and careful as the gardener bestows upon his plants. How cheap we hold human life, when we tend our flowers more carefully than our children ! And in our higher schools—in our Universities, where students are leaving the leading strings that guided or misguided their childhood, and are becoming men, it is of the utmost importance that culture become the supreme object of all effort.

But how is this culture to be attained ? It is to be attained by freedom. Let the child—let the man grow. The problem of the teacher is not to administer to all, as our schools and universities, with infinite harm, administer

to all, food that is kept ever ready-cooked, and often cold. His problem is to discover what food each learner requires—what regimen is best for his due development. If the teacher cannot discover this he cannot teach his pupil well.

In our Universities especially, where students are at an age when they begin to be themselves conscious of aspirations and energies, it is essential that no alien and hurtful influence chill and enfeeble them. The student ought to be left free to develop along the lines of his own nature. The food given him should be such as to perfect him according to his kind. There is no fear that such specific perfection will be a perfection merely of idiosyncrasies. All human knowledge is a whole, and the higher one mounts in a single science the wider is his outlook over all the rest.

Of this knowledge there are two great divisions which are very inadequately represented in educational questions, on the one hand, by the advocates of a classical, and on the other, by the advocates of a scientific training. Culture, say some, is best attained by a study of ancient literature. Culture, say others, is best attained by a study of modern science. Each has his quack nostrum for all. Broadly stated, however, knowledge divides itself into two great hemispheres—the Science of Man and the Science of Nature, and each individual has his chief tendencies towards either the one or the other. The doctrine of culture is that the student should be free to choose either, and any special parts of either, according

to his individual wants and powers. If he have a many-sided mind that penetrates to all departments of knowledge, let us gladly open the way to him, but do not let us force the man of one-sided mind to do the same. Especially let us avoid the capital error of making everyone pass through the same course and learn the same things.

THE RELATION OF SCHOOLS AND UNIVERSITY.

“Tria juncta in uno.”

IT is not my intention to discuss how far our elementary schools are from satisfying the requirements of culture. That they fail to do so is a necessary consequence of the mode in which their teachers are paid. My desire is to show how the evil influence that originates in our Universities spreads over and demoralises our schools, and to trace how this influence might become benign—how, by gradual and by no means revolutionary steps, our whole educational system of University and schools might be made a symmetrical edifice—not, perhaps, the envy of the world, or an example to all nations, but an edifice in which our youth might preen their wings to loftier flights of science than they can now attempt.

And, in the first place, we may regret the grand mistake that underlies Mr. Forster's utterances on the relation of our schools to the University. He seems to think that, in Scotland, the connection between our elementary schools and our Universities should remain, as it is, a very close one, and should indeed be made, if possible, still closer. He rejoiced when, in Glasgow, he was in-

formed that boys from Board schools were the leading prizemen in our University. He rejoiced that the education in our University reached so low a level that it met and overlapped the education in our Board schools.

Mr. Forster is to be pardoned for this error. He was probably misled by imperfect information, and he had certainly an imperfect personal acquaintance with the actual facts. He had not read, or if he had read he had not believed, the first of these University Pamphlets. He did not know that already the classes in our University were too large for the teaching power of the professors, and that it was improbable that that teaching power would be increased in proportion to the increase of students. He probably would not believe that the gentlemen he met, and from whom he gained his information about the University, would take fees for teaching, and yet withhold the means of teaching.

There is nothing unworthy or undignified in our University meeting, or, if it choose, supplanting the elementary schools, as it has already supplanted the secondary schools. It may begin with the English alphabet if it choose; but it is unworthy and undignified, it is a heinous offence, not merely to education in this country but to morality itself, that the University should profess to teach what it does not; and it is utterly impossible for our University to teach even the students it has already got.

Take, for example, the Humanity Classes, consisting of about 600 students. It is the custom in Board schools

to allow no class to exceed forty in number, and I am informed by one who has for many years held a distinguished position as a teacher of languages, that no class learning a language should on any account exceed fifty, and should reach this number only when the students are working very nearly on one level.

Taking this latter figure, the Humanity students should be divided into twelve classes; they are actually divided into three. Each class meets for two hours a day. There are therefore six teaching hours a day, and there are three teachers giving two hours' teaching to each class. Allowing the same amount of teaching to each class, and the same amount of work to each teacher, the Humanity classes, on any system approaching efficiency, ought to have *twelve* teachers instead of *three*.

In the same way the Greek classes should have eight teachers instead of two, and so on with the other classes.

Why do the professors not provide a sufficient number of assistants to do their work? I will not answer that question by saying that I see no reason but their strong love for large salaries, and their weak love for the cause of education. I will leave it to be answered by any one who can.

It is not easy indeed to say how many men might be required to teach 1300 Arts students, such as are now at Gilmorehill—so different in their attainments, in their characters, in their aspirations; but some idea of the difficulty may be gained by anyone who will for a little

ponder over the educational axiom that perfect teaching is only to be had where the teacher addresses himself to one pupil at a time, and its corollary, that the smaller the class the more perfect is the teaching.

Perhaps, however, we may indulge our penchant for arithmetic, and ask how many assistants Professor Ramsay might employ without depriving himself of a reasonable salary. His class yields £2000 per session. Let us suppose that £1000 would be a reasonable salary, and this amount, we must remember, is about three times the salary of Professor Grant. This would leave £1000 for assistants. It is believed that to his two assistants he gives £100 each, one of them having an additional £100 from the University funds, which, in this instance, are supplied by the National Exchequer. At this rate, £1000 would provide him with *ten* assistants, making *eleven* teachers for the Humanity classes, or almost the very number we fixed upon above as approximately efficient.

Could Professor Ramsay not find ten men to assist him at that salary? Let him try. There are many who would be glad to have the position of Assistant in Humanity at even a lower rate than £100 per session. But if £100 is considered a shamefully low salary to give an assistant, he might give £200 to five assistants. Six men could at anyrate overtake more work than three.*

It will hereafter be evident to the patient reader that I consider the system of employing assistants both unjust and noxious; but that does not exonerate a professor from the duty of making the best possible use of it while it lasts.

But what if Mr. Forster's desire was accomplished, and our elementary schools were still more encouraged to pass on their pupils to adorn the University? Here, let us repeat, there would be nothing wrong. Let the elementary schools and the University between them complete the work in which the University has long been engaged, and annihilate our secondary schools. There would be nothing unworthy or undignified in this. But it is unworthy and undignified; it is a heinous offence to the education of the people that the elementary schools and the University between them should set up a pretence of learning for a reality, and by false representations, by bribes, and by flattery, should lead the Scottish nation to neglect the secondary schools—the only schools in which there still remains the possibility of higher teaching.

Let us, however, suppose for a moment that Mr. Forster's scheme was perfected. What would it imply? It would imply that in every Board school you must have masters capable of teaching secondary subjects, or that in the University the Board school system of education should be introduced. The absurdity of both is manifest. It is, on the one hand, impossible to have men with the education and culture required for teaching secondary subjects in all the schools throughout the country. You may have them in a few schools, but by introducing them there you at once differentiate such schools from the others, and revive a secondary as well as a second-rate school system. On the other hand, it is impossible, and would be absurd,

to gather into a University all pupils who wished to proceed from elementary to higher subjects.

But these alternatives never suggested themselves to Mr. Forster's consideration. In a comfortable, almost happy, frame of mind he saw superficial success and imagined it to be thorough. He could not find fault where so much was to be praised. Unfortunately his position gave his words an authority and influence they do not deserve, and confirmed the delusions about our educational position under which the people labour. It is to be hoped, however, that this delusion about the intimate relation of elementary schools and the University, which Mr. Forster has done so much to cherish, may be nipped in the bud, and never be permitted to linger among us like the former delusion we held about our parish schools.

We have already ("Actuals" *passim*) pointed out how our University injures the secondary schools by its unfair competition, its low standard, its monopoly of educational honours, and its apparent cheapness. It is not difficult to see how injurious these are to secondary schools, but the injury done to elementary schools is more subtle and less intelligible to most people. It consists chiefly in the encouragement of showy but unreal at the expense of humble but real education.

By ignoring secondary schools, and by publishing such statements as that boys from elementary schools are the best students at the University, elementary schools are encouraged to send boys to the University, and to bring

them up to the convenient University standard, which, as we have seen, is very near zero. Hence boys are withdrawn from subjects which their teachers know and can teach, to specific subjects in which they are, to say the least, imperfectly informed. They are already bribed to this withdrawal by the Government grants for such subjects, and the allurements offered by the University form an additional impulse in the wrong direction. Boys are withdrawn from a regular course of training which, however imperfect, is yet a course and regular, and therefore of the utmost importance for their mental discipline, to an irregular course in which their school training must be faulty, and their University training probably a minus quantity. They are taken away from the probability of a real gain to the probability of a real loss. Attracted by the beauty of the superstructure, and the gaudy show of attendance at a University, they forget that a foundation is necessary, and they build a house of University certificates—a house of cards—a Tay Bridge, that is graceful to look at, and is proved on paper to be stable, but which the first storm will prove to be a fatal hypocrisy.

Our much belauded parish school system was a system of this kind, and to it, in great measure, is due the decayed state of education in Scotland. A parish school-master was a man who taught every subject of study, from the English alphabet up to the ancient languages, with whatever of science he imagined he knew. Hence nothing was taught properly, and only a promising pupil

here and there obtained even a respectable amount of training. The majority had the name without the reality. This is the system that our School Boards wish to perpetuate when they introduce secondary education into elementary schools. It is the system our Universities help to perpetuate by their low and degraded standard of education.

What we require is thoroughness. We need no decorative gilding of superficial science in the rooms of our elementary schools. Let us be done now and for ever with gilding. Let us have thorough elementary education for all. Let us have thorough higher education for those who have the time, the ability, the desire for it. Let us have thorough University education for those who can rise still higher than the secondary schools; but let us no longer mix up all three in that indigestible Scotch broth, which has, in time past, retarded all true and vigorous growth.

How is this thoroughness to be attained?

It is to be attained chiefly by the action of the University. Education is a tree that grows from its top. The seat of mind is in the head. Let the University be made a real University, the schools beneath it will become real. Let it remain as it is, a sham, the schools beneath it will give a sham education. The University must cease to pursue the course it has pursued in the past. In the past it has kept gradually lowering its educational standard, in order to meet the parish, and, latterly, the Board schools. It must cease to do so. It must close its gates against

those men whose fees are now considered to condone their ignorance. Its standard of admission must be henceforth an educational, and not a money standard.

Glasgow University recognises this necessity. It proposes to employ an educational standard next session. So far as it is yet disclosed the examination is to be of the lowest kind, and will be suited to boys leaving our elementary schools. Were it thorough even at that low level it would be matter for congratulation. But it is to be imposed only on students under the age of seventeen, while it is notorious that it is the students over that age who are the most ignorant and the most shamefully incompetent alumni of the University. The standard proposed, in fact, is, as is usual with the proposals of this University, a sham standard, which would make a show of excluding ignorant men while leaving an open door for their admission. Boys from schools do not require this paltry examination, but it is imposed upon them. Men from the mine, the bench, the shop, require to be examined, but they are freed from it. O that it could be thundered into the ears of this University that the people of Scotland desire thoroughness, and will not much longer endure such hollow insincerity! O that our professors could forget pecuniary considerations, and give themselves, as they often pretend to give themselves, wholly to the cause of education!

Is such a hope utterly vain?

It has been made a boast by Glasgow University that

it proposed an entrance examination years ago. Such a boast reveals how dead and blind it is to its plainest duty. A tradesman may regret, but is not likely to boast, that though he personally desires to act honourably, he must do like his neighbours, and adopt the tricks of his trade. The more shame to him. The more shame to Glasgow University that it knew its duty years ago and has never yet done it. It has been hindered by an unholy fear. It feared it would lose its fees. If it instituted an examination which other Universities refused to adopt, its students would leave it and go where they had an easier entrance. But in this Glasgow is no worse than our other Universities. Instead of having a "holy boldness" in the cause of education, that cause for which alone they exist, they have shown an unholy and cowardly rivalry in a contest for fees. *Pecuniary interest* in these so-called educational institutions has been the controlling power. Shameful! And all the more shameful when it was clearly manifest to them all that by their united action they were shutting out the possibility of higher culture from the people of this country. How true that when this people asked them for bread they gave them a stone!

But while our professors are with one hand setting up this farce of an examination, with the other they are throwing gold dust in the eyes of the public by a proposal to establish General Council Bursaries. Backed by their retrograde friends in the General Council, they are scouring

the country begging for funds to establish open bursaries. What does all this mean? It is but an ill-disguised prop to support a system of pillage—a dam to stay the advancing tide of public criticism. The entrance examination is in its conception, as it will be in its execution, a thorough sham, a delusion, and a snare. It will not cost our Glasgow professors the loss of one guinea; and the bursary scheme will only fill the students' pockets with money, and provide a richer mine of gold from which our professors may help themselves. The raising of bursaries would be followed by the raising of the fees. They seem to hope that these half measures, this sham examination and bursary scheme, will screen them from the scrutiny of an Executive Commission. Some little show of progress will be made to delude a credulous public, while the radical evil will be allowed to remain. A genuine entrance examination, obligatory on *all* students, would cost no money, and would instantly raise the standard of attainment throughout the length and breadth of the country. Bursaries are a waste of money, a costly luxury; and as they are competed for only by the *élite* of the students, they leave the general mass of ignorance untouched. What we want is a high standard, not partially and inadequately, but fully and universally applied. If the Government would insist on a proper entrance examination, conducted, not by the professors or their hirelings, but by independent examiners, we could throw all our bursaries into the Clyde to-morrow, and get well on without them. We have

plenty of money. It is control and organisation that we want.*

Our Universities have forgotten the purpose for which they exist. They are not now places of education. They are not now national institutions existing for the benefit of the people. They are private shops, where professors indulge in a lucrative trade, in the pursuit of which they adopt the usual methods of shopmen in other trades. They highly recommend their own goods, and disparage those of others. Wherever they can secure a monopoly by patenting their manufactures they do so. When they secure this monopoly they raise their prices, in order to enrich themselves still more.

But this is an endless topic, and fruitful of nothing but regrets. Let us pass on to another subject, which, well considered, would be fruitful of endless good.

* See "Testimony of First M.A.," Pamphlet 111., pp. 1-16; and this Pamphlet, pp. 35-36.

COMPARISON OF SCOTCH AND GERMAN UNIVERSITIES.

"Si licet parva componere magnis."

THE first thing that strikes one in comparing the Scotch and German Universities is the enormous difference in the number of teachers. For example, in 1881-82, Glasgow University had 2320 students in all its faculties, and its professors, lecturers, and assistants engaged in teaching these students numbered 47. In 1864,* nearly twenty years ago, Berlin University had 2500 students, and its teachers numbered 183, or 130 more than it would have had on the Glasgow system.

Taking the Faculty of Arts alone, Glasgow University had in 1881-82 nine professors and eight assistants, or seventeen teachers in all. Berlin University had in 1864, in the same faculty, *twenty-eight* full professors, *thirty-three* extraordinary professors, and *twenty-nine* privat-docenten, or ninety teachers in all.

As a result of the number of teachers, the number of things taught is correspondingly great at Berlin, where,

* 1864 is taken because we have the authority of Mr. M. Arnold for the figures relating to that year. The figures for the present year are given on my own responsibility, and are therefore more open to question.

in 1864, in the Faculty of Arts alone, there were 175 courses of lectures. Here, surely, is large material for choice, and the student with special wants can have these supplied. In Glasgow, as we have seen, there are in the Faculty of Arts *nine* courses of lectures! Each of these may possibly represent three of the German courses, giving thus *twenty-seven* courses in all, as opposed to 175 courses at Berlin. That is, the teaching in Glasgow is equal to less than a *sixth* of the teaching at Berlin. It is matter for regret that we cannot compare quality so easily as quantity, for in quality we should certainly find in Glasgow only a small fraction of a sixth of what is to be found at Berlin.

The figures are even more remarkable if we take those of the present year. The number of teachers in Berlin has increased to 241. Those in the Faculty of Arts to 118. In this faculty, during the present winter session, there are to be upwards of 250 courses of lectures, while the difference in the number of students is not great—1799 last session at Berlin, 1331 at Glasgow. In Glasgow, as we have seen, the courses of lectures correspond to about twenty-seven German courses. The *sixth* has now diminished to a *ninth*.

The difference between the Scotch and German Universities, indeed, becomes ever the more enormous the farther you investigate the subject, and if it were known, would rouse the people of this belated country to some earnest emulation of its neighbours. No deceitful representations

of interested advocates would then be put forward. No false flattery would cozen it into the belief that Scotland was still in the van of learning. (Alas! alas! how near the rear!) The truth in its nakedness—stripped of even the ideal beauty that ought to clothe it—stated in mere arithmetical figures, would make it cover its face in shame. As Glasgow was eager in 1450 to copy Bologna, and found the pattern well-suited to its needs, so now would it be eager to copy Berlin. Scotland would say to those seventeen men—or rather to those nine men, for eight of the seventeen are the mere subalterns of the others,—“We are tired of your presumption. We know you do your best, but it is a manifest impossibility for you to do the work you pretend to do. We can no longer endure this pretence. It must cease at once and for ever.”

Would that these pamphlets could carry to my countrymen any conception of the work that is yearly done in Berlin University, and how vastly, how immeasurably superior it is to that done in Glasgow. Let us for a little listen to the words of a calm and unprejudiced man, writing not for us or with any thought of us, but for Englishmen, and let us note how his unimpassioned description of the German University system sounds the sternest condemnation of Glasgow University.

“The University Faculty, as a teaching body, comprehends not only all the full professors of that faculty, but all its professors extraordinary, or assistant professors, and all its privat-docenten. The Dean of Faculty

“ascertains from all the full professors, all the professors
 “extraordinary, and all the privat-docenten of his faculty
 “what subject each one of them proposes to treat in the
 “coming *semester* (half-year). There is perfect liberty
 “of choice for each lecturer, but by consent among them-
 “selves they so co-order their teaching that the whole
 “field of instruction proper to their faculty may be com-
 “pletely covered. Then the Dean calls together the full
 “professors who make the administrative faculty, and the
 “programme of lectures is by them drawn up from the
 “data collected by the Dean, and is promulgated by
 “their authority.

“All full professors must have the degree of doctor
 “in their faculty. Each of them is named for a special
 “branch of the instruction of his faculty, and in this
 “branch he is bound to give at least two public lectures
 “a-week without charging fees. He receives from the State
 “a fixed salary, which is sometimes as much as £350 or
 “even £400 a-year. He has also a share in the exami-
 “nation fees, and he has the fees for what lectures he
 “gives besides his public lectures. The regular number
 “of full professors in each University is limited, but the
 “State can always, if it thinks fit, nominate an eminent
 “man as full professor in a faculty, even though the
 “faculty may have its complement of full professors; and
 “the State then pays him the same salary as the other
 “full professors. Both from the consideration which
 “attaches to the post, and from its emolument, a full

“professor’s place is, in Germany, the prize of the career
 “of public instruction, and no schoolmaster’s place can
 “compare with it. At Heidelberg several professors have,
 “I am told, an income from fixed salary and fees to-
 “gether of £1000 a-year, and one an income of £1500.

“The professors extraordinary or assistant professors are
 “also named by the State, but they have not, in all
 “cases, a fixed salary. Their main dependence is on
 “fees paid by those who come to their lectures. They
 “are in general taken from the most distinguished of the
 “privat-docenten, and they rise through the post of pro-
 “fessor extraordinary to that of full professor.

“Other countries have full professors and professors
 “extraordinary. France, for instance, has her *professeurs*
 “*titulaires* and her *professeurs suppléants*, but the privat-
 “docent is peculiar to Germany, and is the great source
 “of vigour and renovation to her superior instruction.
 “Sometimes he gives private lessons like the private
 “tutors of our (English) Universities. These lessons have
 “the title of *privatissima*. But this is not his main busi-
 “ness. His main business is as unlike the sterile business
 “of our private tutors as possible. The privat-docent is
 “an assistant to the professorate. He is free to use,
 “when the professors do not occupy them, the University
 “lecture-rooms. He gives lectures like the professors,
 “and his lectures count as professors’ lectures for those
 “who attend them. His appointment is on this wise: A
 “distinguished student applies to be made privat-docent

“in a faculty. He produces certain certificates and per-
 “forms certain exercises before two delegates named by
 “the faculty, and this is called his *Habilitation*. If he
 “passes the faculty names him privat-docent. The autho-
 “rization of the minister of education is also requisite
 “for him, but this follows his nomination by the faculty
 “as a matter of course. He is then free to lecture on
 “any of the matters proper to his faculty. He is on his
 “probation. He receives no salary whatever, and depends
 “entirely on his lectures. He has therefore every motive
 “to exert himself. In general, as I have said, the pro-
 “fessors and privat-docenten arrange together to parcel
 “out the field of instruction between them, and one sup-
 “plements the other’s teaching. Still, a privat-docent may,
 “if he likes, lecture on just the same subject that a pro-
 “fessor is lecturing on. There is absolute liberty in this
 “respect. The one precaution taken against undue com-
 “petition is that a privat-docent lecturing on a professor’s
 “subject is not allowed to charge lower fees than the
 “professor. It does honour to the disinterested spirit in
 “which science is pursued in Germany, that with these
 “temptations to competition the relations between the
 “professors and the privat-docenten are in general excel-
 “lent. The distinguished professor encourages the rising
 “privat-docent, and the privat-docent seeks to make his
 “teaching serve science, not his own vanity. But it is
 “evident how the neighbourhood of a rising young privat-
 “docent must tend to keep a professor up to the mark,

“and hinder him from getting sleepy and lazy. If he gets sleepy and lazy his lecture-room is deserted. The privat-docent, again, has the standard of eminent men before his eyes, and everything stimulates him to come up to it.

“In the Faculty of Philosophy at Berlin the number of privat-docenten is almost exactly the same as the number of full professors. There are twenty-eight full professors, and twenty-nine privat-docenten. The professors extraordinary are more numerous than either,—they are thirty-three in number. The whole number of teachers in the University of Berlin is 183.

“Now I come to the students.* The University course in Theology, Law, and Philosophy takes three years; in Medicine it takes four or five. A student in his triennium often visits one or two Universities,—seldom more. . .

* In Berlin University there are, of course, none of the shopmen and artisans to whom Mr. Gladstone, in December, 1879, without sufficient qualification, referred as the pride of Glasgow University. A student there is forced, by the law of the land, to fight his way up through many slow stages till he has established his claim to enter the University. He is on no consideration admitted as a *regular* student unless he has attended a High School under the direct control of the State, in which all the masters are State officials, carrying a State diploma of special proficiency in some one department. In such a school he cannot rise from a lower to a higher class without satisfying all his teachers, by his general work, and by written and oral examinations, of his fitness to be advanced; and at the end of his course he is subjected to an Exit or Maturity Examination, which determines whether he is to remain at school or proceed to the University. According to Matthew Arnold, any and every German lad, *on passing to the University*, is at least equal to the best boy at Eton or Harrow; and that being the case, he is head and shoulders above the rank and file of Glasgow Passmen, and quite on a footing with Honours Graduates. A Glasgow student (!) may have been at manual labour up to the day on which he enters the University.

"The University entrance fee is about 18s. . . . The
 "lecture fees range from 16s. to £1 14s. for every course,
 "which is not a public and gratuitous one. They are
 "somewhat higher at Berlin than at most German Universi-
 "ties. In the Faculty of Medicine they are highest. Here
 "they go up as high as £1 14s. a *semester*, for a course
 "of about five hours a week. A course of the same length
 "in Theology or Philosophy costs, at Berlin, about 17s. a
 "*semester*. The fees are collected by the University
 "*quaestor*, and they must be paid in advance. But every
 "professor has the power to admit poor auditors to his
 "lectures without fee, and often he does so. Poor students
 "are also, by a humane arrangement, suffered to attend
 "lectures on credit, and afterwards, when they enter the
 "public service—which in Prussia means not only what
 "we in England call the public service, but the learned
 "professions as well—their lecture fees are recovered
 "by a deduction from their salary. Each University has,
 "besides, for the benefit of poor scholars, a number of
 "exhibitions, ranging from £12 to £60 a year, and it is
 "common to allow the holders of school exhibitions, which
 "are of smaller amount, and range from £6 to £30 a
 "year, to retain them at the University."

What is the result of this system?

The result is, that Germany leads the vanguard of the
 learned world, and that German scholars are at the head
 of every department of human attainment. The result is,
 that if we have in our country a man who desires more

than mediocre attainment in learning, he endeavours to finish his course of study in Germany, and this not in one study nor in one science, but in all. Students of Biology and Physics—students of Philosophy, of Theology, of History,—students of every subject in the realms of nature and of man, seek to perfect themselves in some German University. Yet, in the face of facts like these, we have men who scoff at *doctrinaire* reformers, and actually maintain that our Scottish Universities are better suited to Scottish students than any copy of Berlin would be.

Such men have an argument, on which they base their assertion, but it is one that possesses neither truth nor plausibility, and can hardly be believed even by those who put it forward. Here it is in the form of an oracular deliverance, given to a Glasgow professor, not by Lord Beaconsfield, as might have been inferred from its grandiose audacity of falsehood, but by ‘a distinguished ‘friend who is professor in one of the most famous ‘Universities in Germany.’ “The Universities of a “nation are the outgrowth of the life and history of the “nation itself, and frequently its most natural and genuine “outgrowth, because they have, until recently, seldom been “the plaything of the idle hours and restless fancies of “statesmen and theorists.”

The Universities the outgrowth of the life and history of the nation itself! When? Where? How?

Not in Scotland, where they were founded by foreign

Popes and moulded after foreign patterns, which they to this day retain, and where the nation has never till now had a voice in their government; not in England, where, as in Scotland, the Universities have, since their origin, been almost totally withdrawn from the current of national life; not in Germany, where they have, within the last century, been brought into real union with the national life and history, not by the action of the nation itself, but by the joint action of "statesmen and theorists."

In truth, there could hardly be a more false and falsifying statement than that of our professor's "distinguished friend." The Universities of Germany are perhaps those in which the needs of the nation are best provided for; but this provision has been made not by the nation, which *there* would have been as impotent as it has been *here*, to mould them in accordance with its wish and necessity. The provision has been made by the rulers of Germany, acting according to the direction of the wisest and most clear-sighted heads in Germany. And never will our Scottish Universities satisfy our Scottish wants until our rulers do as the German rulers have done. "Statesmen and theorists," "*doctrinaire* reformers," or whatever else you please to call them, are the only men who will effect reform. Never will any real progress come from a reformer like Professor Jack. He is a reformer without a doctrine,—without a theory. He will object to no Consulting Commissions—those playthings of idle hours—but will object to all Executive Com-

missions,—in other words, he will hear everything but do nothing ! He calls himself a reformer ; he opposes reform. But the universe is against him and such as he. Reform must come, and this decrepit University, tottering as it is with age, while clogged by the swaddling cloths of its infancy, must be released from its limitations, and bathed and rejuvenated in the nectar of modern ideas. Only so can it be made fit to teach to our Scottish youths the science of the present time.

If our statesmen are wise they will do as those of Germany have done ; they will consider the nation's wants, and reform the Universities in accordance with them ; they will not tinker our University into an imitation of Berlin or of any other, but will throw it into the smelting furnace and recast it in a form designed for Scottish use. In doing so they will of course encounter the opposition and incur the hate of those who benefit by the present system, but they will earn the applause and the gratitude of all future times.

UNIVERSITY FINANCE.

*“ When learning’s gone and science spent,
“ Then money is most excellent.”*

IT is asserted, as an explanation of the symmetrical arrangement of the German University system, that it is maintained by State money, and could never be maintained by other means. “Give us,” say our Glasgow professors, “sufficient aid from the State and we will make our University perfect also.”

This is another of the misrepresentations which are made to delude the Scottish people into the belief that its Universities are doing as much and as good work as can be expected of them. The German Universities are indeed largely supported by the German Government,—or in other words, by the German people. But let us see how much is spent upon Berlin University.

For the year 1864 the whole income of the University of Berlin, from State endowment, fees, and funded property, was £29,518. The sum of £29,518 supplied the monetary wants of the wonderful organisation we have just considered. On what sum does Glasgow support its shamefully deficient organisation? I blush to record that the income of Glasgow University, for the year 1881-82,

amounted to £37,427, or about £8000 more than was spent upon Berlin University in 1864; and this sum is exclusive of £9609 which it received as income for scholarships, bursaries, and prizes. The whole income of Glasgow University for 1881-82 was, therefore, £47,036, or more than one and a half times the whole income of Berlin University for 1864. And what has it done with it? It has done about one-sixth of the work that Berlin University has done. On £47,000 it has produced about one-sixth of the result that Berlin University produced on £29,518,—in other words, £47,000 in Glasgow is worth about £4920 in Berlin!

Is there no waste here? Is it not a clamant injustice to the people of this country that Glasgow University squanders, for no result, upwards of £40,000 of its hard-earned money every year?—for no result, that is, except to enrich professors.

The University and the Inland Revenue both being national concerns, why should the Government limit the salaries in the one case and give *carte blanche* in the other? Why should Glasgow University be merely an exploiting ground for a few private individuals? The money in Berlin is looked after by Government, and is made to produce its proper result. The money in Glasgow is left to the tender mercies of a Corporation over which the people has hitherto assumed no control. When the nation does assume control, what will happen?

One of two things—

Either the fees demanded from the students will be lowered by the partial or total substitution for them of a Government Grant, or the Government will leave the fees as they are and allow no grant at all; for no addition to the present income is necessary. The revenues of Glasgow University are demonstrably sufficient to equip and maintain a model University, such as we see at Berlin. What is needed is that its revenues should be applied to their proper purpose—to the purpose of education, and not to the enrichment of professors.

But when will the nation assume this control? When will the present or some future Lord Rosebery have courage to propose reforms radical enough to put our Universities on a proper footing? I know not. But this I do know, that if this Scottish nation clearly saw the injustice under which it suffers from the present University system, there would be such an outcry that, before the end of the year of grace 1883, this system would be for ever swept away. But whether this year or another, its doom is fixed. The evil has already become too gigantic for endurance, and every year is adding to the burden of iniquity under which it must sink into annihilation. Our only prayer is that the end come quickly!

A MEDICAL INTERMEZZO.

“ Auch von der Medicin

“ Ein Wörtchen.”

THE Medical Faculty at Glasgow University has been improved since my time by the resignation of one completely incompetent professor, and the appointment of a thoroughly good man in his place. It has possibly degenerated in other respects by the resignation of moderately competent and the substitution of less competent men; but whether, on the whole, improved or the reverse, it remains—in its anomalies, its defects, its absurdities, and its injustice—a fit companion to the Faculty of Arts, which we have hitherto mainly considered.

Looking again at the German Universities, we may for a moment compare the Medical Faculties *there* and *here*.

Last session there were at Berlin 653 medical students, and at Glasgow, 624. The number is therefore nearly the same in both; but how different the provision made for them!

At Berlin there are, in this present session, 1882-83, *fifteen* ordinary professors, *twenty-five* extraordinary professors, and *forty-eight* privat-docenten, or *eighty-eight* teachers in all.

At Glasgow there are *twelve* professors (of whom two are only nominally University professors, and teach not in the University, but in the Western Infirmary), *two* lecturers, and *seven* assistants, or *twenty-one* teachers in all.

At Berlin there are *one hundred and ninety-eight* courses of lectures delivered by the *eighty-eight* teachers.

At Glasgow there are *fourteen* courses of lectures, and as each of these may, as in Arts, be taken to represent *three* of the German courses, they equal about *forty-two* courses, or *one hundred and fifty-six* fewer than those at Berlin.

These figures are more eloquent than words to express how utterly inadequate the Medical Faculty in Glasgow University is to give its students a proper training for their profession. They show that, for about the same number of students, Berlin provides about five times the amount of teaching that Glasgow provides, and the average German medical student may be regarded as having about five times the knowledge of his profession that the average Scotch graduate possesses; and, as I have pointed out in speaking of the Arts Faculty, if any man wishes to become well skilled in his profession, he must go to study in a German University. The public mind would indeed be alarmed did it for a moment conceive the condition of the average Scotch graduate who issues from the University with a license to take charge of the people's health. A man, for example, may get his degree without having ever seen a case of scarlet fever or measles, or indeed almost

any other of the commonest diseases, except such as are constantly to be seen in an hospital ward.

But even in the hospital ward, what is the case? Here lies a patient with pneumonia (inflammation of the lung). The professor, with perhaps thirty students, approaches the bed. The patient is seriously ill, but the teacher, in his zeal to instruct, permits half-a-dozen of his following to note the peculiar signs of the disease. The other twenty-four have no opportunity, and may never have until, in their own practice, they meet with a case which they guess to be pneumonia, if they do not rather diagnose it at once as fever—fever being especially a class of disease which they never see as students.

To use our arithmetic again. About one-fifth (say six out of thirty) of our medical students are able to get the teaching provided for them in Glasgow University, and that teaching, as we saw, is about one-fifth of that provided for them at Berlin. In other words, each Glasgow medical has one-twenty-fifth of the chance that each Berlin medical has of becoming a competent practitioner.

We have already seen that our University spends considerably more than Berlin spends. Why are the results in Berlin so immensely superior to those in Glasgow? There is one reason that underlies all others—one evil root from which the fruit takes all its bitterness: it is that in Berlin professors and students love science more than wealth, while in Glasgow they love wealth more than science. But we must recount a few of the

modes in which this morbid condition of Glasgow manifests itself.

A.—THE MONOPOLY POSSESSED BY THE MEDICAL FACULTY.

The Medical Faculty alone has the power to grant the degree of M.D., and *practically* also it monopolises the teaching of the students who aim at that degree. I say *practically*; for though the Medical Faculty of Glasgow University has of late years been shamed into a recognition of teaching given outside its walls, its monopoly of the degree completely destroys the value of that recognition. It is not likely that the student will attend the class of one teacher in order to pass the examination of another, and a rival teacher. Hence it follows that, while extramural classes are neglected, those in the University are crowded, and in such classes as those of Medicine and Surgery, where students attend for two years, the room is scarcely fit to contain the number; and from the crowded class follows, of course, the deficient teaching.

This monopoly, then (1), keeps the teaching in the hands of a few professors who may, or may not, be able to teach—who are, at anyrate, *less* able to teach than some who are not professors, and (2) leads to such enormous classes that the students cannot be taught even by capable men.

B.—THE ANTIQUATED METHOD OF TEACHING BY LECTURES.

In medicine there is no lack of text books of universally recognised excellence; but our professors persist in lectur-

ing, and inflicting the stupid drudgery of notetaking upon their students. It happens, indeed, that at least one of our professors has his lectures printed in a volume, of which his students usually purchase a copy. But this professor placidly reads his lectures in the class-room, and his students have to write out, or *pretend* to write out, in their notebooks what is already printed for them. What a waste of time!—of time so precious to the medical student, who has so much to learn!

C.—THE EXTRANEEOUS MATTER DRAGGED INTO THE MEDICAL COURSE.

This applies, however, not more to Glasgow than to our other medical schools. In the medical curriculum are included botany, natural history, and chemistry, which have as little relation to medicine as they have to civil engineering. They are retained in the course simply because they were introduced into it before their proper relations to it or to anything else were well understood. If, indeed, they were taught in their relations to medicine they might have some value to medical students, as they would have to engineering students, if taught in their relations to engineering; but they are taught as distinct sciences by men who take no part in medical practice, and have, presumably, very little knowledge of medicine. Indeed, the most distinguished of them—the Professor of Chemistry—does not even possess a medical degree.

D.—THE ESSENTIAL MATTER LEFT OUT OF THE MEDICAL
COURSE.

This is the most appalling item in the inventory of this monstrous faculty. The sciences of Physiology and Pathology are the basis of all medicine, yet, up to 1876, there was no teaching in Physiology, and even now there is no Professor of Pathology in this University. In my time we had, indeed, a Professor of Physiology, but his lectures were inaudible, his examinations were a farce, and his class could be fitly described only as pandemonium. There is now a real and not a sham Professor of Physiology, but his class is not recognised as one of the important classes of the curriculum, as Surgery is. It meets only one hour a day. It is too large for anything like adequate instruction, and the practical class, where real instruction might be had, is not a required part of the course. ●

There is a lecturer on diseases of the eye whose class consisted of *four* students when I was in it. But diseases of the ear, of the teeth, of the larynx—indeed of all special organs—are ignored. Diseases of children—that large item in the student's future practice—are hardly ever touched. Such a thing, of course, as the history of medicine, or the discussion of any other subject not immediately concerned with the prescribed curriculum, is quite out of the question.

E.—THE MODE OF CHOOSING AND OF PAYING THE
PROFESSORS.

When a medical chair is vacant, any medical practitioner may apply for it, and will get it if he have influence enough in the proper quarter. Accordingly, the qualifications of a candidate are not superior knowledge of the subject, or superior ability to teach it, but simply a superior acquaintance with those who have the appointment. When a candidate is appointed, he is appointed for life, whether he prove competent or incompetent, and his monopoly may ruin the teaching of his subject so long as he lives.

It is, of course, very desirable to obtain such a post. Not only are the emoluments derived from it considerable in themselves, but his position as professor will at once procure the holder a large practice, in which his former fee of perhaps five shillings will mount up to one or two guineas. If he know—as probably he does know—that his appointment barred the way against a man in every way superior to himself, he may blush at the injustice,

*“But the jingle of the guinea helps the hurt that
honour feels.”*

It is a bottomless subject this of the payment of professors, leading through gloomy depths of selfishness and greed which make one shudder. The medical professors are paid to give their services to the University, and are

paid well. Professors Gairdner and Macleod, for example, must have each considerably over £1000 per annum from their chairs. But this is a mere trifle to the amount their position brings them. Their yearly income must be several times this amount. The professorship, in fact, is a mere step to the acquisition of wealth from which the University derives no benefit, although it is by means of the University that it is acquired. In my first pamphlet I said, "There is nothing like an Arts professorship for making money;" I must now add—Nothing, indeed, except a Medical one! The money, however, is made not so much *in* the professorship as *through* it.

The possession of a medical chair would be a lucrative one even were there no emoluments directly connected with the office. How, then, should such a chair be endowed? Evidently with a very small endowment. To endow it largely—to give a professor of surgery, for example, £1000 or £1500 a year when he could be got for a mere nominal sum, is to throw away money. It is simply to repeat in an aggravated form the injustice done in the Arts course, of taking from students, who are usually poor, not such a sum as would sufficiently pay the University for its trouble with them, but such a sum as the professors think fit to demand.

How, then, should the medical professors be paid? The professors of Anatomy, Botany, Natural History, Chemistry, and Physiology, who do not practise medicine outside of the University, should evidently have a suffi-

cient salary to be independent of other work, but the professors of Medicine (two), Surgery (two), Materia Medica, Midwifery, and Forensic Medicine, whose professional duties are subsidiary to their practice, should have merely nominal salaries—say £200 per annum. In this way there would be a saving on these seven chairs alone of fully £7000 a year, which might be employed in many ways for the advance of medical education, instead of, as now, for the enrichment of individuals.

Or the mode of payment ought to be the same in all cases. In Medicine as in Arts the professors should have a fixed income, and the emoluments derived from their chairs, whether directly or indirectly, should pass into the University exchequer. A professorship, in fact, should not be a commercial speculation, but should be, as it were, a Government office, to which are attached a fixed salary and certain duties. In this way the seven chairs of which I speak should be worth fully £15,000 per annum to the University, or more than half of the whole income of Berlin University in 1864! By its present action Glasgow University is throwing all this money into the pockets of seven professors, whose chairs constitute by no means the chief occupation of their lives. Can there be any wonder that our University is so inefficient in its work when it wastes in this way the income that might easily equip it in the most perfect manner for the education of its students? The money is spent, but the students are not educated. The money is wasted.

How long are our Universities to be left to pursue this career of shameful and shameless waste? Is there no external power that can take control of its resources, and make them produce results as good as those produced by smaller resources at Berlin? The University, by a long-continued display of imbecile effort and hypocritical earnestness, has proved its incapacity to reform itself. The nation, and the Government that represents the nation, must now turn to a duty too long neglected, and no longer permit one of its institutions to evade its duty, and a set of its officials to make their office a means of preying on the public.

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MEDICAL DEGREES.

"A wolf in sheep's clothing."

THERE was a time when learning was supposed to require the support of popes and kings, and schools of learning were surrounded and guarded by privileges of various kinds. It was the same in every department of human activity. To maintain it in a position of power and of respect each University had its privileges, just as each trade corporation had its rights. As no one but a guild-brother could start in Glasgow as a goldsmith, so no one could start in Glasgow as a teacher without special license. Even with special license he could not trench upon the sphere occupied by the University, lest he should withdraw students from it. All this had its origin in the old-fashioned idea that freedom was a dangerous thing; that to leave a good thing alone was to expose it to the powers of destruction, and that the only way to preserve it was to guard it from all change. Nobody then knew that change is essential to life of every kind—that that which does not grow and decay is already dead.

Among the privileges possessed by the University may be reckoned its degrees. The possessor of a degree was, *ipso facto*, endued with certain rights which no other than

a graduate could possess. But the age of privilege is ended. In the case of all except the medical degrees, the privileges of the graduates have dwindled to the mere shadow of a name, and this process of decay has been greatly helped by the incompetency of the graduates themselves to command a continuance of the respect which once followed their title.

To the medical degrees, however, are attached some legal rights, which give their owner a position that no un-graduated practitioner of medicine can hold. His degree gives his signature a legal value which no other possesses; hence the importance of a medical degree.

It is evident, however, that these legal rights give a medical degree a false value—a value not inherent in itself. The degree becomes valuable, not as an evidence of education, but as a guarantee of legal and social status. Its value as an evidence of education in Glasgow we have seen to be about one twenty-fifth of its value as such in Berlin; but, confining ourselves to this country, the educational value of the Glasgow degree is higher than that of some and lower than that of others. In Glasgow itself, for example, there is another degree-granting body besides the University, but the educational value of its degree is considerably lower than that of the University, while the legal and social value of the two degrees are the same. In short, the medical degrees of this country have all one legal value, but their educational value is different in each case.

This is owing to the fact that there is no uniform test applied to those who are entering the medical profession. The test, in every instance, is left to the freewill of the degree-granting body. Notwithstanding the legal importance of the Medical Degree, it has been left, like the degree in Arts, to be raised and lowered in value at the option of irresponsible corporations. Accordingly, when we call in a physician to attend our sickness, we have no guarantee whatever that he is a competent man. He may be a graduate who has concluded his course at Berlin, and is probably, therefore, able to help us; or he may be one who has studied only at Glasgow, and is, therefore, presumably incompetent.

But the public ought to have some guarantee that its health is in the charge of competent men. It desires more of a medical man than his legal competency to sign a death certificate. It ought to be able to have faith in its doctors. How is such a guarantee to be obtained? The guarantee is only to be obtained by a uniform test applied to every intending practitioner, and this test must, as in the case of teachers, be applied by a body responsible to the country. The Government, in fact, must appoint a body of examiners, independent of the medical schools, to examine the results produced by these schools, and to admit only capable men to the possession of a Medical Degree. So long as Government fails to do this—so long as it permits irresponsible corporations to grant degrees on which it confers a legal value, without

subjecting the graduates to a thorough test, it is evidently unjust to the country, which regards it as guaranteeing the competency of medical men.

Hitherto our Government has neglected this manifest duty ; but it cannot long do so. Already there are signs of beginning change, and when the change does come, what will be the result upon our University?

The result will be of the best kind. It will at once destroy the monopoly of teaching which the University possesses, and will open to the teaching talent of the profession a career that has hitherto been closed. When a University Chair is filled by an incompetent man, the class-room will be deserted, and, if the occupant does not retire in shame, the University will be forced to discover a plan for his removal. There will be freedom of teaching and freedom of learning, such as exist in countries more favoured than ours, and the University will cease to worship money and begin to worship science. Our students will no longer be forced to sit at the feet of some unworthy man who has reached a professorial chair by impudence and flattery, but will be able to leave him and betake themselves to that unassuming talent which they are in present circumstances forced to neglect. The medical curriculum will cease to be a shapeless congeries of isolated sciences, and become an ever more perfect training for a serious profession. Unnecessary studies, which at present cumber it, will be consigned to their proper sphere ; necessary studies, which

are at present neglected, will be introduced ; and our practitioners will be generally, instead of rarely, competent to take charge of the people's health.

But there is another result which, notwithstanding its importance, men are apt entirely to forget. I refer to the extinction of that professional quackery which is the bane of medical practice.

Every one despises a quack ; but the supreme quack is not the man who places a few herbs in his window and practises medicine without a diploma. That man may be as faithful to his light as the purest devotee of science. The supreme quack is the man who has all the legal qualifications of a physician—perhaps even the status of a professor, who pretends to the profoundest knowledge of his art, and is yet conscious that it is all a sham,—that well-phrased humbug is the best cure for every possible disease.

And more or less every man who receives this Glasgow Degree is forced, by his conscious incapacity, to become a quack,—he has to assume a knowledge he does not possess. How otherwise gain a livelihood ? Will he tell the patient who consults him that he is ignorant of his disease, and so send him to some other physician even more ignorant and less scrupulous than himself ? Nay, he will *do his best*. That is the phrase he will use as flattering unction to his soul. He will do the best that Glasgow University has enabled him to do, and will bungle at his patient till nature ends the illness in recovery or death.

This fatal quackery—fatal not only to the science, but to the morality of medical practitioners—will be extinguished by the simple expedient of a more thorough degree examination. It will be extinguished with comparative ease, for quackery is at first repugnant to the practitioner, and becomes easy and pleasant only when the sense of morality is blunted, and the course of falsehood found to be the path of worldly success.

So long, no doubt, as people in general are ignorant as they are at present of the very elements of medical science, quacks will continue prosperous, but their numbers will diminish, and the University at least will cease to be a wholesale manufacturer of them.

THE HOLY MINISTRY.

"Quantum mutatus ab illo."

THE title Reverend, like the title M.D., has no uniform significance. It is held by men of all degrees of education, from the country minister who speaks of *pastorial* visitation, and describes Mr. Parnell as the *incarceration* of wickedness,* and the D.D. who pronounces Thales like Wales, and speaks of Plato swallowing the fatal hemlock, upwards to the gentleman who still retains the title by the sufferance of the Free Church, Rev. William Robertson Smith.

Even the highest clerical degree—that of D.D.—is, as is evident from the monosyllabic Thales, no proof of learning. Nor is the highest clerical position in our country—that of Professor in a University Divinity Hall—any proof of learning, for appointments there are made on even worse principles than in Arts and Medicine. In Arts it is usual to go for scholars to another country, since the Universities have ruined scholarship in our own. In Medicine men from all parts of the kingdom may apply for a vacant chair. But in Divinity the choice is restricted to the members of one denomination.

Contrary to its ancient traditions, according to which any qualified scholar, even if a layman, could be chosen as a Professor of Divinity, the University has allowed its Divinity Chairs to be monopolised by the clergymen of

* See *Scotsman* of November 23rd, 1881, for a few "Facts" of this kind.

one limited sect. This sect has, perhaps, more than any other in our country, maintained a position in education approaching to respectability. It is, nevertheless, a national injustice that the opportunity of teaching should be refused to competent men in other churches.

But even within the ranks of this sect, how are the professors chosen? Are they not chosen on the same system of corruption and jobbery as that we have observed in medicine? Any Established Church clergyman, from his position, is regarded as qualified to teach *any* class in Divinity, and whoever has sufficient influence will gain the office. I have heard of a person applying for a Professorship of Oriental Languages, who, a few months before his application, was being taught the elements of Hebrew by a fellow clergyman. Poor scholar as he was, this person had sufficient influence to gain the chair, and is now known to the world as an Oriental Scholar (!), while the clergyman who taught him was too modest to apply for the chair, and too unacquainted with the art of place-hunting to have even the ghost of a chance. Such professors as this may extol the method of appointment now in vogue—

*“It puts all the cunningest on us in office,
And reclises our Maker’s original idea,”*

but it is a method that does signal injustice to the cause of learning.

We have already seen what the students are like when they enter the Divinity Halls, and we need not to go far

to see what they are as they leave them. Many of these men have entered the University with a serious purpose. They have felt the breath of a diviner spirit than their own, and have resolved to dedicate themselves to its work. But by a long course of sham education, the University tinctures them with its own hypocrisy, and turns out the majority of them even worse quacks than its medical graduates. Even worse, because its medical graduates are nearer the region of external nature, where a corrective is often at hand, while the new-fledged clergyman is launched at once into an intangible sphere, where there is no corrective whatever, except the balance of a well-disciplined soul, of which he is rarely the possessor.

It is thus that our Universities have promoted that sovereignty of cant under which our country groans, and which has made it now for many years one of the least enlightened countries of Europe. While it boasted of the teaching of Knox, and the educational system which he had sketched, it forgot that that teaching was three centuries old, and that that system, necessary as it then was, and ever more necessary as it had become, had never yet existed, except in his sketch, and in the fond delusive dreams of a self-satisfied people. Instead of proclaiming the failures and pointing out the necessities of this people, the Universities have aided its decline and blinded it to its needs. Instead of being organs of enlightenment, they have held up a fatuous flame, and deceived the people by shouting aloud: "Behold, how brilliant is your light!"

It is unnecessary to trace the same anomalies into the Faculty of Law, where, even of late years, changes have been introduced with the direct result of lowering the standard of education. We have come far enough in our considerations to take up a question which must be answered in one way or another before our Universities can receive their permanent form.

TECHNICAL EDUCATION.

“Haud in Artibus.”

*“Men, my brothers, men, the workers, ever reaping
something new,*

*“That which they have done but earnest of the things
that they shall do.”*

THE question is this:—Ought professions to be taught in a University? In other words—for professions are now infinitely more numerous now than they were in the Middle Ages—Should Universities give technical education?

A sufficient answer is given in two words—THEY CANNOT.

I do not at present insist upon the injustice done to all other professions by the exclusive appropriation of the name of *learned* by Law and Medicine and the Church, and by the unworthy claims that they have made, and are making, upon the purse of the country. I do not at present accuse the University of its blindness to the progress of the world

which has thrown back these three professions from their position of unrivalled and unapproachable dignity to the level of other professions of more recent growth. My contention is that Universities can no longer give the training necessary even for these professions.

The University could, indeed, teach them when all that was known could be embraced in verbal formulæ, and when the study of nature was unknown. But now that we recognise the protean character of fact, and have commenced the investigation of natural phenomena, we know that there are no formulæ in which a single art can be taught. In the world of external nature our men of science have done what Mirabeau did for himself in the world of morals. They have abolished all formulas. Men cannot learn a trade from verbal rules. Neither can they from such rules learn what is called a profession.

It is, for example, impossible to learn the practice of Medicine from a set of University lectures, however excellent. You can learn it only in the presence, and by the study of disease. It is impossible to learn the practice of Law from lectures. It can be learned only by the personal conducting of individual cases, notwithstanding the fact that Law is chiefly a mere imitation of precedents. It is impossible to learn the work of a clergyman from lectures. It can be learned only by contact with, and personal study of, moral disease.

It is because our University has not learned this, and still adheres to the extinct delusion that it can teach in

its class-rooms what can only be taught in the living world outside its walls, that it has been content to flood the country with such inefficient doctors, and lawyers, and ministers. Taught in a University, they cannot be otherwise than inefficient. "Men do not gather grapes "of thorns." But the country demands, and will with ever louder voice demand, that these men be efficient, just as it demands that engineers and architects, and men of other professions, be efficient.

How are they to become so?

We have already seen that in the case of Medicine efficiency would be attained by a Government test for medical graduates before their efficiency was guaranteed by a degree,—the medical profession being just now in the anomalous position of having a State guarantee without undergoing a State test. In the cases of the Church and Law this is also really true, though not literally correct. The clergyman, for example, may have no degree—no guarantee either from the University or from the State—but his position in the Church is to the people a guarantee that is hardly ever called in question. In the Established Church, indeed, his position is tantamount to a State guarantee—this Church being in the same anomalous position as the medical profession in having a State guarantee without a State test. For the nation has no voice in the administration of the National Church. Its only duty towards it is to supply it with national funds.

In the case of all it ought to be a recognised rule: *No guarantee where there is no test.* The Government is unjust to the nation when it gives a guarantee, or allows a guarantee to be given, without sufficient inquiry.

But what ought to be the relation of the University to these and all other professions?

In the first place, the University should have no power to give a guarantee. The degree-granting body should be distinct from the teaching body. When an architect builds you a house, you send a man to examine his work. When an engineer makes you a locomotive, you send an inspector to test the engine. But when a University produces a learned man, or a physician, you send no inspector to test its product. It is the long-continued want of this external inspection that has led to the debased condition of our Masters of Arts, our doctors of medicine, our lawyers, and our clergymen. It is the exercise of this external inspection which has raised our extra-academic professions—our engineers and ship-builders, for example—to the eminence they occupy.

At Glasgow there is now a lecturer on “Naval Architecture and Marine Engineering.” If shipbuilding and engineering were indefinite professions like Medicine and the Church, and admitted an equal amount of quackery, the University would give the students who attended this course of lectures a degree guaranteeing their efficiency as shipbuilders and engineers, and they would pose before the world as capable men—all the more capable that they

had been "in the University!" How absurd! Yet the absurdity is not greater, but only more evident, than in the professions which at present receive a guarantee from the University.

I need not again insist upon the objection to degrees given by the University, upon which I have commented in the preface to Pamphlet III. It is sufficient to remember that the possession of a degree-granting power by a teaching corporation at once opens the way to the practice of parasitism, favouritism, and sycophancy—arts which should as much as possible be rendered impracticable. We must also remember that the teaching body which possesses this power has a practical monopoly of the teaching—an injustice to all other teachers presumably as capable.

It is said that if the degree-granting power were in the hands of an extra-academic inspectorate the University would be in danger of becoming a mere cramming machine for the manufacture of candidates. But that danger exists under the present arrangements as well, and it is here coupled with the still greater dangers that have been mentioned. It is not pleaded that the degree should be granted without a test. The University desires to retain the test in its own hand in order that its inefficiency may not become manifest to the country at large. The test for a degree, however, as soon as it is in the hands of an independent body, will, as far as possible, be made such that cramming will not be a sufficient preparation for it, and well-grounded knowledge will be

required. The proper place for obtaining this knowledge ought to be the University.

The University should be related to the Professions as Science is related to Art. Its aim should be the acquisition and the spread of knowledge of all kinds. Its teachers and its students alike should be as they were in former times—fellow-labourers in one work, in which the teacher had merely greater experience and insight than his pupils. The unrighteous inequality which at present throws a gulf between the student and the professor should be removed. The selfish and unworthy aims which actuate both should be changed, and whoever had knowledge to communicate should be welcomed to the University as adding to its power.

The very word University, indeed, means the one place into which all knowledge is gathered, and had our Universities been worthy of the name, they would have continually expanded with the expansion of knowledge. What prevented this? The University pleads its poverty—a poverty which we have seen to be self-imposed and criminal; but it cannot plead poverty in at least one case of which I have heard. I understand that a wealthy Glasgow Institute offered to endow a professorship in our University, but the University rejected its proposal. The University is a close corporation, and the secret springs of its action can only be guessed at; but in this, and perhaps in other instances, it is supposed that one or two of the professors suspected that their pecuniary interests were threatened,

and so got the proposal rejected. If this is not the reason, then the University ought to disclose the real cause of its refusal to permit an addition to its teaching staff, even when that addition was to be made at no expense to itself.

The University does not seem to refuse such additions when professors go through the form of asking permission to employ assistants. Our evidence has shown how incompetent these assistants sometimes are, but they are the mere hirelings of the professors, and the University is only indirectly responsible for them. The professors have no objection to employ subordinates, but they object to any being put on an equality with themselves. These aristocrats give a pittance to some drudge who does their dirty work for them, such as the teaching of alphabet and elementary subjects, the correction of exercises, the oral examination of students, &c., while they monopolise the status and the fees of the professorate. The employment of subordinates is an injustice to the assistants themselves, who are poorly paid, and get the heavy end of the work, while they sometimes surpass their superiors in scholarship. It is also an injustice to the students who come to the University to be taught by the professors and not by their hired subordinates. The professors ought to be ashamed to take the fees of students whom they cannot teach except by deputy. They ought to be ashamed to place men, who may be their equals or superiors, in a position so much beneath themselves as their assistants.

And the University should refuse to sanction this injustice and shame. But, alas! What is the University but the professorate?

Into the University, then, all knowledge should be gathered, and men from all trades and professions—from the Christian minister to the coal-miner—should find in it the science on which their practical work is founded, the solution of the difficulties which surround it, the reason and the result which are inherent in it. The physician, for example, who is bewildered by the phenomena of disease, should find the explanation of these phenomena in the University. The shipbuilder who is hesitating about the shape of his vessel, or the form of its motive power, should find at the University an aid to the removal of his doubt. The miner who is puzzled by the geologic form of his mine, or endangered by its gases, should find in the University some solution of his puzzle, and some escape from his danger. Here all trades should be lifted to the level of science, and the impulse of investigation—the scientific *Forschbegierde*—should pass hence into all the avenues of human activity. The University should be the pioneer of knowledge, and the men who frequent it, whatever be their title, should be the advanced guard of science.

Alas! alas! Our Universities look backward and not forward. They mumble of the past when they should be forecasting the future. When they should be active they are indolent. When they should be free to advance they

ar dragged backward by selfish monopolists. But the time is near when the bonds of Antiquity will be broken, and from the crumbling prison-house our youth shall issue, free to enter the lists with the youth of other countries, on equal terms and with equal equipment.

Ναὶ, ἔργου, ταχὺ.

COMPENSATION TO PROFESSORS.

"Aye—there's the rub!"

THE obstacle to University Reform is not the want of money, nor the want of evidence that Reform is necessary, nor the want of desire for Reform in all who are interested in education. The great obstacle is the vested interests of the professors. How are they to be dealt with?

It is to be regretted that men, and especially men who have for many reasons a claim upon our respect, should have a vested interest in what is evil. It places them in a peculiarly delicate position, and we are apt to judge them too harshly. We are ready to ask them to show the magnanimity we might expect from honourable men, and to vacate at once and without ulterior considerations the unworthy position they hold. We might even be ready to assure them that such an act would benefit rather than injure them. But magnanimity is an uncommon virtue. We must not expect anything so admirable from our professors. We must rather expect that they will exact the uttermost farthing of what is legally their due, and our business will be to find out how much that is.

An Arts professorship is a decaying office. Its business is departing from it, and the blaze of monetary success through which it is at present passing is but the last gleam of an expiring light. The progress of Science has brought us to a new platform, where the Arts chairs are no longer the first or highest of educational forces, though they still usurp the throne. Naturally, the Arts professorships should be like those decaying villages throughout our lowland districts where handloom weaving was once the general trade. Modern machinery has taken their trade from them and left them with sinking roofs and crumbling walls and grass-grown streets. What became of their vested interests when the steam-loom came to sweep away their trade? What compensation was given to the weavers of our country when their once busy hand was forced to lie idle on their breast and poverty became their portion? Their vested interests were disregarded. Compensation was never thought of. They were poor and insignificant, and Nature did its cruel will with them. They had either to succumb or adapt themselves to the new circumstances.

From our professors no one proposes to remove their trade. What is proposed is to place them on a natural instead of an unnatural relation to education in Scotland. The result of this, of course, would in some instances be to destroy their business. Such a subject as Logic, for example, would be taken by a very small number of students, and such a teacher as Sir W. Thomson would have an empty class-room. In all cases, indeed, the result would

be to diminish the trade and the consequent profits of the professors. The professors foresee this, and resist the change just as our weavers resisted the introduction of machinery when they foresaw that it would diminish their profits. The weavers received no compensation; the professors will probably do so.

It ought, however, to be distinctly understood that the professors' claim for compensation is not a claim upon the justice, but merely upon the compassion of the country! If they were obscure and poor, like the weavers, their claim would be ruthlessly put aside. "It is Nature, not we. We are not responsible for the ebb and flow of prosperity!" Allow that the professors have a just claim, where are such claims to end? To take the weavers again: they had a just claim, and as this was never satisfied, they and their descendants have still a just claim! Their landlords, whose houses are standing there deserted and rentless, have a just claim! Their butchers and bakers, their grocers and cobblers, whose trade was taken from them by the decay of their villages, have a just claim! And so on *ad libitum*.

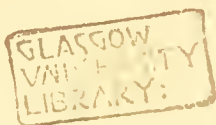
To take another instance. Supposing that a medical man had received an appointment to a lucrative practice in a populous district, and that some years thereafter, from the decay of trade in the district, the population became greatly diminished, would he have a just claim to be compensated by Government for the diminution in his practice? No. But the Government, in consideration of his long and faithful services, and his unselfish devotion to the cause

of the public health, might of its kindness grant him some yearly allowance! This, however, is not justice at all. It is pity that dictates compensation. We have departed from Nature in our appointments to those chairs, and Nature is ruthless in her return. Man has to temper her sternness with mercy wherever he is able. Pity only that our mercy does not carry us farther, and to cases more pressing than those of our professors!

But whether from Justice or from Mercy, we may take it for granted that our professors will receive compensation. It would take an accomplished casuist to say how much they ought to get. Should the amount, *e.g.*, be calculated on the present profits, or on the profits at the time they entered the professorship, or on the profits as they might on the present monopolising system be expected a few years hence? Should it be paid in one sum, or continued yearly, like the pensions to superannuated professors? Should the professors have the choice of taking the whole sum and at once retiring from office, or of remaining in office at a fixed salary, the amount of which would be deducted from the amount of compensation? Perhaps the simplest arrangement would be to calculate the amount of compensation on the present income, and give it in yearly sums *minus* the fixed salary of the professorship which the present holder may retain if he can.

To take the seven Arts professors alone. Supposing that their incomes average £1800 a year, and that a fixed income of £1000 was allowed to each, then £5600 per

annum would be left as a charge upon the compensation allowance. Such a sum as this could easily be obtained. The great obstacle, if you look at it rightly, is a mere molehill. The University itself, indeed, were it left free to develop in a natural manner, would soon pay it off. But it would be undesirable for the University to have such a burden thrown upon it, even for only a few years. Were the Government to undertake this charge, and leave the funds of the University free for the improvements so greatly needed, all that is necessary, though by no means all that is desirable, would be done in the way of assisting the University exchequer. The essential duty of Government in regard to this, as in regard to all other University matters, is not to supply unlimited money, but to see that abuses are nipped in the bud, and never permitted to become so rampant as they are at present.





University Pamphlets.

V.—CONCLUSION.

BY
THE EDITOR.

Glasgow:
ROBERT L. HOLMES,
3 AND 5 DUNLOP STREET.
1888.

P R E F A C E.

A PREFACE is usually a postscript, and it is as a postscript to this series of Pamphlets that this preface must be regarded.

There are many things that I might, with advantage, have referred to in this concluding pamphlet. I might, for instance, have referred to the "Plague of Books" which is so prevalent at Gilmorehill—each Professor thrusting his own productions upon the students, and thereby augmenting out of the students' pockets his already overflowing salary. Or I might have referred to the relations of the Glasgow Professors to one another by blood and marriage, and thereby suggested an explanation of the appointment of some of them which might not be the correct one. For Genius, like Gout, may run in families. But it is said by some of my friends that these pamphlets are already sufficiently full of such suggestions, and I will not proceed further on that line.

Let me rather, in the first place, explain to my readers, that my original intention being to supply them with evidence from all the Universities of Scotland, I found that when collected this evidence would be too voluminous to print by one who was going "a warfare on his own charges."

The evidence from St. Andrews—by far the smallest of our Universities—was itself almost sufficient for one pamphlet. I considered it best, therefore, to leave the Glasgow evidence as a fair sample of all the rest.

Not, indeed, without hesitation—for the effect of the Glasgow disclosures has been so marked at Gilmorehill that there might be hope of some good being done with the others also !

But the good that can be done by the voluntary exertions of our present staff of University officials can never be anything but fractional. Evils that originated in the selfish acts of one or two Professors, unchallenged by the lassitude of a Senate destitute of public spirit, and that might easily have been nipped in the bud, have now grown to such a height that the feeble means that sufficed to produce them are far from being able to root them out. It is to public opinion, the public voice, the public law, that we must look to lift Scottish education to a higher plane, and place it on a level with that of other countries.

Our first need—let me again urge it !—is not *money*, as some would have us believe. Our first need is *organisation*. A million might be spent on our Scottish Universities as they are just now, and the result would be of small benefit to the country. We greatly need an organisation of the secondary schools, but our chief need is the organisation of the Universities. These hold a recognised place in the country which the secondary schools do not yet. It is from our Universities that our doctors, lawyers, ministers—indeed

all our professional classes—come, and the process of University reform, while not interrupting the production of these necessary members of the social body, must aim at improving the breed. I may repeat also that were the Universities put into a satisfactory form the organisation of the secondary schools would follow as a natural consequence, even without Parliament issuing any decree to that effect. From all points of view, the first—the most necessary—the most important step in education our country can take is a new modelling of the Universities. For such a step we must look to the country itself.

I intended also to summarise the evidence I gave, so that the importance of parts that might be passed over without notice by some readers might be recognised by all. This I have not done both because the evidence adduced referred only to one University and required it less, and because the pressure of other business left me no time for judicial work of that kind. It is the fate of those who begin a work which necessarily extends over a considerable period of time to find many unexpected things happen between the beginning and the end. Life—what a strange fluctuating sea!—So that intention also is unfulfilled.

But while we regret these unfulfilled intentions which might have made the University Pamphlets more effective, it is gratifying to think that the work of my little “cloud of witnesses” has been already productive of good at Glasgow University. I trust that good has been done elsewhere also, for these little books have, “contrary to expectation, spread

“abroad with some degree of impetus,” so that of “Actuals” the first edition of a thousand copies was exhausted in about three months, and I am informed that the whole series is still in demand from the booksellers. The circulation also, which I expected to be confined almost exclusively to one class, has been very general throughout all classes, and has excited an interest in this question which may be productive of much good in the future. Scotchmen understand better than they did the abnormal condition of their Universities, and are not likely to offer much opposition to the proposed reform, however radical it may be. They will think it can hardly be too radical.

Even our Professors will come, from mere familiarity with it, to look at a thorough-going reform as inevitable, and they are not likely to offer it such determined opposition as at one time seemed probable. The half reform they plead for will seem ridiculous even to themselves, and they will prove only half-hearted in its advocacy, judging that there is now no hope of halting short of thoroughness. I judge as much from the action some of them have already taken. For example, it is only in this way that I can explain Professor Ramsay’s treatment of his junior class this session. We may look at this for a moment.

It will be remembered that Professor Ramsay used to divide his junior class into two sections—*lower* and *upper junior*—according to the results of an examination held at the beginning of the session. The *lower junior* were understood to be men who required to begin their studies in

Latin, not indeed with the alphabet, but with words or the first declension. This year the announcement appeared in the calendar that—*the lower and upper junior* being now called respectively *junior* and *middle*—the *junior class* would meet only one hour a day instead of two hours as in former sessions. This meant that the men in most need of training—the men who, for the most obvious reasons, and by the plainest demonstration, ought to be under a teacher for several hours a day were to receive only half the attention they were formerly wont to receive. They were to receive, we might say, only half the attention they paid for, as there was no announcement of a reduction of the fee from three guineas to one guinea and a half.

This was inexplicable to any one not in Professor Ramsay's secrets; and while it illustrated the arbitrary power a Professor has over his students—the mode in which he is accustomed to treat them as it suits his own convenience—it was hard to believe that Professor Ramsay had resolved on this change merely to give such an illustration. Since the beginning of the Session, however, the explanation has perhaps become possible. It is probably as follows:—

Professor Ramsay has two assistants, whose whole time ought to be given to the work of his enormous classes. His first assistant, however, has this year resolved on becoming a clergyman, and is taking classes in Divinity. He has, accordingly, little leisure for his work as assistant

to Professor Ramsay. In ordinary circumstances the Professor would at once have appointed a new assistant and dismissed the baby theologian, but rather than do this, he has allowed his junior class to be neglected. Why this preference? May it not be simply because Professor Ramsay thinks that such great changes are at hand that it is unnecessary for him to make any new arrangements? And this seems to be the opinion of the Senate as well, for their consent must have been given to the unfair arrangement he has made. Truly,

Whatever wrong Professors do,
The students pay the piper!

But I do not think the Senate would have supported Professor Ramsay in his wrongous act had they not despaired of having the direction of the University much longer in their own hands. And we may welcome their despair as a good omen for the future—an unwilling prophecy of blessing from the Balaam that would ban reform!

From the fragments of a Universities Bill at the end of this pamphlet, it will be evident that I do not consider the Bill read in Parliament last Session a satisfactory one. Numerous faults of detail have been pointed out which were mere accidents in the Bill, and would have been rectified when the Bill was again brought before Parliament. But its essential defect was the want of full directions to the Commissioners, and the implied under-

standing all through that they would make but little change. They had certainly great powers given them, and had thorough-going reformers chanced to be appointed, all that is necessary might have been done by them. But where was the likelihood of the appointment of such men? The chances were all against them. The Lord Advocate himself informed a Glasgow deputation that little change, except in details, was intended.

From such a Bill as that, brought forward without any clear view of the necessities of the case, or at least without any real hope of meeting these necessities, what good is to be hoped for?

The Government must be bold enough to state what they wish the Commissioners to do—what changes they are to make—what aim they are in their legislation to pursue. If they would believe it, and if Parliament would believe it, this question is of inexpressible importance to the country. It is of far more importance than franchise extension, or any other question of civil or political rights that can be brought before them at present. The whole future of our country depends upon our settlement of the question of education, and of this question the settlement of the Universities is the most important branch.

But to take up the Universities and legislate for them, as is proposed in the Government Bill, is essentially a process of tinkering. It is impossible to legislate for the Universities alone. The legislators must include in their view the whole range of education in Arts, in Literature,

in Science throughout the country, and legislate for it all. It must determine the relations of the Universities and Schools, of the Universities and Professors, of the Universities and Scientific and Literary Research. They must lay down a ground plan which future legislators may fill up but will not change. Are they wise enough—are they bold enough to do so? *Nous verrons.*

But *our* little undertaking is for the present ended. When we have to write and read a new series of University Pamphlets may they be the celebration of happier times, and not, like these, the record of “the sufferings endured when • cast on unpropitious shores by hostile “Fate.”

MEDICUS.

December, 1883.

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INTRODUCTORY.

“Infandum, Regina, jubes renovare dolorem.”

A YEAR has elapsed since we began this series of Pamphlets, and the walls of Jericho have not yet fallen at our trumpet blasts. Are they even shaken? The Professors still may count their towers and number their palaces as before. The crowds of students are undiminished. The assistants to Professor Jebb and to Sir Wm. Thomson, and the “Beelzebub” of the Reading Room, have not yet been removed to congenial spheres, though their appointed time is surely at hand. Sir Wm. Thomson still lectures *de omnibus rebus et quibusdam aliis*, though he has made tremendous exertions “to stick to the point” since Pamphlet II. appeared. Professor Ramsay has not yet appointed ten assistants to aid him with his herds of sheep and goats. Professor Jebb still preserves a haughty disdain [for those Scottish youths whose scholarship is much more contemptible than their money. Professor Veitch still rolls forth for about the twenty-fourth time—not including private rehearsals—his Hamiltonian “Common Sense” and

“Philosophy of Consciousness.” In all the mystic seven we may search for but find no seeming change.

Is there, then, no change? Is it possible that, after the exposure we have made of the state of things at Gilmore-hill, the Professors are “at ease in Zion,” and eager as before to perpetuate the evil thing? We hope not. They are men who have walked in old paths without realising how far astray they were, but now their error has been pointed out, they are too honourable to remain in it. It would, of course, be too much to expect them “to confess their sins and turn from them unto righteousness” at the prompting of an anonymous pamphleteer. We must give them time, and they will yet manifest “a true repentance.” But if they would take advice from one who desires their best good they would not long delay. Let them be in haste to reform lest a worse thing befall them.

But I write not for Professors, and may now bid them farewell. I shall not again, I trust, be called upon to write of them as I have done. May they be converted! May a truer light guide them henceforth—the light not of selfishness, which is always misleading, but the light of unselfish desire for the good of the people they are appointed to serve!

We must not, however, be unwilling or slow to recognise and acknowledge the efforts the old University has already made to meet our demands:

1. Our readers will remember the description of the Reading Room in Pamphlet II., pp. 41-45, with its

riotous students and impotent ruler. An effort has this Session been made to remedy this frightful condition. Every student who enters the room is put into a special seat, so that if a riot is made in any part the occupants of that part are known. A young friend of mine was rather amused at a regulation which prevented him and a companion from occupying neighbouring seats. "Fellows who know one another must be as far apart as possible!" All success attend the authorities in their attempt to make the name Reading Room no longer a misnomer.

2. Professor Ramsay (Pamphlet II., Letter 1; and III., p. 28) used to waste an indefinite time in getting his class in order. This year he has endeavoured to plunge at once *in medias res*, and in particular, has denied himself the pleasure of that introductory speech with which he wooed the students from "vulgar and material pursuits," to the calm delights of Academe.

3. Professor Jebb has prescribed Sidgwick's First Greek Writer for his Junior Class of this Session, though, so far as I am aware, he has not yet been able to begin it. It will be remembered that one of my correspondents (Pamphlet II., pp. 26-30) lamented over the teaching in Junior Greek, and especially over the absence of English-Greek exercises during the greater part of the Session, and their "jejune" character when they did begin.

4. Sir Wm. Thomson and his assistants are labouring hard to carry out their full programme this year, and

even last Session, although Pamphlet II., in which their melancholy failure was depicted (pp. 70, *et seq*), only appeared about three months before the Session ended, they contrived to lecture on Dynamics, Hydrostatics, Heat, Light, Sound, Electricity, Magnetism, and Astronomy before the close of the Session!

Last Session, also, Sir William introduced a decided improvement by inviting a small section of his class to supper. This was quite unprecedented on his part, and a poor parody of old and better times when the students supped daily with the Professors. But if Sir William were to invite about twenty of his students every week, he would be able to meet his whole class twice a Session at his own house. This would be worth trying, and the attempt would at least atone for many faults, while giving him a better insight into the character of his students.

5. Professor Caird is not this year giving his students "a fragmentary History of Philosophy" (Pamphlet I., second edition, p. 20), but is treating them to a profound criticism of Hume, which, it is hoped, will do them much more good. This change, however, may be due less to my allusion in "Actuals" than to the appearance of a poor pamphlet, entitled "Aids to Moral Philosophy," which is understood to give a student's notes of his lectures on the History of Philosophy, and of which Professor Caird is so much and so justly ashamed that he is prosecuting the publisher. Professor Caird has also this Session introduced daily oral examination of his

students, instead of weekly, as in former sessions. This will be of much greater service than the meagre recapitulation of the preceding lecture which he used to give, and shows a keener appreciation of the wants of his students, or a keener desire to meet their wants. (Pamphlet II., p. 56.)

6. Professor Nichol has been good-humoured enough to say, in reference to Pamphlet III., pp. 31-33, that he "must be very much more strict in the future:" he has this session introduced, like Professor Caird, a daily oral examination, which cannot fail to benefit his class, and he has pre-arranged in a way never before done by him the dates of examinations, exercises, &c., in his two classes, for the whole session. (Pamphlet II., p. 4.) But our chief result from him has been a plea for reform, which he put forth in the *Fortnightly Review* for last month. It is a pity that we have to regard Professor Nichol as having so little in common with his brother Professors that we cannot look upon this paper as more than the expression of his individual opinion. Soon—ah, how soon! would reform come were our Professors desirous of it.

But these *notabilia* are trifles. It is not a process of tinkering like this that is required. The disease is a radical one. The cure must be the same. The Scottish University must be remodelled. In this last Pamphlet I desire you, my reader, to look with me towards the future of our Scottish Universities, and see them as they must be if they are to exist at all. We will paint no

ideal picture. We will take the materials we have and see what can be done with them. What *is* done with them at Glasgow we have already seen. But Glasgow is hardly worse than the others, and we must now, as far as possible, take all the Scottish Universities into our consideration.

THE UNIVERSITY EVIL.

"Moribunda, moritura."

WE have already seen that the chief evils that infest our Scottish University system are these:—

1. The limitation to antiquated subjects and methods of study, resulting in a neglect of those subjects and methods that have come into importance in modern times.

2. The admission of students to the University who are in every sense unfit to enter upon a University course.

3. The appropriation of each recognised subject of study by one teacher in each University, who is therefore without the healthy stimulus of rivalry, and who, while monopolising the fees, may be quite incapable of teaching the subject of which he is professor.

4. Excessively large classes and consequent neglect of the individual students, who may be said, with nearly absolute truth, to obtain no tuition whatever.

5. Waste of money in the excessive payment of the Professors, who are thereby bribed to maintain the present University system, with its throng of attendant evils.

6. The employment of assistants, who are the nominees of the Professors, and aid them in the upkeep of their large and inefficient classes.

It is tedious to repeat the long tale of injustice, but the evil is so subtle, the professions of our Universities are so fair and seeming honourable, that even the most eager reformers are sometimes almost tempted to think that all is as well as it can be—that at any rate the thing will last our time, and we need not meddle with it. But we must not listen to these blandishments of the devil. It is time that this evil thing were trampled under foot, and its dust thrown to the winds of Heaven, to give room for a fairer and juster system to arise in its stead.

The Scottish University system is in a state of senile decay. Already old when it was imported into our country, it has not expanded with the growth of the centuries. It retains its ancient limitations, and the knowledge of our time is hardly admitted within its bounds. The numbers of our students have increased manifold, but they are mostly students only in name. The few who are real students are attracted to the University by the hope of learning, which they soon find to be a delusive hope; but the great majority go to the University as the only way to the profession they intend to pursue. Who goes to the University for learning? We go to the University for certificates, for passes, which enable us to enter certain professions. Those students who learn anything learn it not in the University, but by themselves, in their lodgings,

at their own homes. They do not even get guidance in their studies at the University. Not one in a hundred of the students has any individual tuition from the Professor beyond the half hour per six months, of which we wrote last year. And any one who wants to study anything more recent than the Middle Ages cannot get even that small amount of tuition upon such a subject within the University.

Why is this? Simply because the University authorities have had *no* inducement to admit any except the ancient subjects within the sacred precincts, but *every* inducement to keep out as many as possible. It seems, indeed, that this year Glasgow is trying the experiment of dropping one (Astronomy) out of its M.A. list of subjects—an experiment not difficult to perform, as this subject has been as good as ignored for many years. (Pamphlet II., pp. 71-72.)

I say *every* inducement. By the present system our Arts Professors in Glasgow, who are seven in number, have from £1200 to £2200 per annum. Under a proper system the number of student^s would be spread over more than seven times seven Professors, and the salaries of the present lucky seven would therefore be reduced considerably. Is it likely that they will be eager or even ready to enter on a crusade, the very first result of which would be to diminish their salaries? It would be honourable. It would be a course worthy of all praise. It would show that they have really at heart the good cause they profess.

But, alas! we are fallen on evil days. Magnanimity is antique. We must not look for self-sacrifice from men. Do we not see the very Christian preacher counting the value of his pulpit by the money it brings him?

There is, therefore, practically *no* inducement for our Professors to enter this crusade, except in the half-hearted way they have already done, by calling on Government for money. "Give us money, not a paltry £40,000, which "we have already had for many years, and which feels "as nothing in our capacious maw, but a handsome sum, "something corresponding to what you give our Elemen- "tary Schools, and we will show what the old system "can do."

For the same reasons they maintain this system, even where a Professor is notoriously incapable to teach the subject of his chair, and may for more than forty years maintain a sadly ridiculous mockery of lecturing. They cannot, or at least do not appoint another to oppose this mock one, and demonstrate his incapacity to himself by emptying his class-room. (Pamphlet II., Letter V., note especially pp. 91-92.)

Poor old system, now near its end! Let us not be too harsh with it. It was good in its day, but foolish and selfish men have kept it from its grave too long. It begins to stink in men's nostrils, and really demands Christian burial from all good people.

OUR REQUIREMENTS.

"Astræa redux."

THE knowledge of a disease is the first step to its cure. We have long studied this University disease, and have seen its cancerous infiltrations passing out in subtle, destructive threads backward through our Secondary and our Elementary Schools, and forward through our professions, to gnaw at the heart of our National culture. Its origin is known to us. Its method of development is known to us. Its symptoms are not dubious.

The great question is as to the method of cure. Is there a Holloway's or a Beecham's pill that we can administer to purge away this evil? Alas, no! To remove it we must proceed by the modern way of science, and not by the ancient way of haphazard. Before we can attempt to restore the diseased body to a state of health we must know what the state of health is. We must have our eye upon the goal towards which we would run.

What, then, would be the condition of our Scottish Universities if they were in a state of health?

We might answer this question in the terse style of our old Westminster Catechism—"Our Scottish Universities would be in a state of health if they were the "direct opposite of what they are!" But we must avoid epigram, and descend to some detail.

1. The chief evil, the tap root from which all the others spring, and which renders all the others possible, is, as we have seen, the limitation of the University studies to a few antiquated subjects. There should be no such limitation. The University, as has been said in former pamphlets, should welcome every science and every teacher who has knowledge to communicate. It should be the pioneer, and not the rear guard, of knowledge. In this case, then, it ought indeed to be "the "direct opposite of what it is."

2. The students should be permitted to attend the teacher whom they find helpful to them, and should not be bound slaves of any Professor. There ought to be a choice of teachers, as there ought to be a choice of subjects, and the Arts course should not be confined to the narrow circle of seven Professors.

3. Before a man is appointed to a permanent post like a Professor's Chair, he ought to have given some proof that he will fill it with benefit, and not, as at present sometimes happens, make it a simple mockery and shame. The case of Sir W. Thomson is a living example of the fact, that however thoroughly a man may know his subject, he is not, therefore, able to teach it.

For a teacher special qualifications are needed, and no proof of their possession can be given until the man has actually tried to teach.

4. Even when a teacher becomes celebrated for his good qualities there ought to be a limit to the number permitted to attend him, and no encouragement by increased salary or otherwise should be given to the growth of enormous and unmanageable classes.

5. Every student ought to be in close relation to his teachers, and should be required to consult them in his difficulties, and not, as at present, repelled from doing so by the teachers' want of time and other causes.

6. Before entering any class the student ought to be examined as to his fitness for entering it, and not, as now, permitted to enter the University and to obtain University certificates when his educational condition is so low that he ought still to be at some Elementary School.

7. The whole administration of the Universities should be based on the principle that they exist for the students, and have no interest except in the advancement of knowledge. Any other interests that come in to thwart or oppose this supreme interest—whether they be the vested rights of Professors and other officials, or the ancient and now impossible regulations imposed by “pious donors” ought respectfully, but unflinchingly, to be put aside. Buildings, Endowments, Professors, Libraries, Librarians, officials, and offices of all kinds, exist, and

only exist, that these young men may be helped towards knowledge and trained to thought. This is the great fact on which our Universities are based—on which they were originally founded—and which is now all but forgotten. The officials have come to think that *they* are the important factors of the University, and that they and their interests are entitled to the first consideration. Curious fallacy that Time produces! Yet, have we not read somewhere that “he that would be greatest must “make himself the least, and he that would be master “must make himself the servant of all.”

Such being some of the conditions of health in our Scottish Universities, how are they to be attained? In other words, what is to be the method of Scottish University Reform?

“THE SINEWS OF WAR.”

A GREAT, if not absolutely perfect, reform is financially possible. The Scottish Universities are poor when compared with such wealthy corporations as Oxford and Cambridge. But we have already seen, with regard to Glasgow University, that, poor as it is, there is a scandalous waste of its money, and that it is far from attaining the results which even its straitened means could reach if rightly husbanded. We have seen that on an income larger than that of Berlin University in 1864 it attains only one-sixth of the result attained at Berlin. (Pamphlet IV., p. 25.)

But what is true of Glasgow University is not less true of the others. Not all equally rich, they are tainted by the same vices, and the poorest is saved from actual sin only by its greater poverty. St. Andrews, which is the only Scottish University where actual teaching is still possible, where the classes are of manageable size, where, in short, there is still left some tincture of the real University and less intermixture of the spirit of shopkeeping, is built on the same lines, and presents the same essential faults as Glasgow. It is less extravagant, merely because it can less afford it.

We have already seen that the income of the teaching staff in the Scottish Universities is derived partly from fees and partly from endowments. From these sources the Edinburgh Professors last year obtained £40,000, and the Glasgow Professors £29,000. Let us take these sums then, and let us contrast what is now actually done, with what, under a proper system of economy, could be done with them. And let us take the larger University first.

According to its Calendar for 1883-84, Edinburgh University has thirty-eight Professors, with incomes ranging from over £2000 to about £500. It has also 44 assistants, with incomes ranging from £200 downwards. It has, therefore, 82 teachers in all. We will not quarrel with this statement, or endeavour to prove, as might perhaps be done, that some at least of this number exist only in the Calendar—are not teachers, but names. We shall merely show that even this number is less than half what it ought to be.

It is an educational axiom, derived from long experience and unbiassed judgment, that a class of learners should not exceed about 35. The fewer the number the better. A class of one is the perfect ideal. But above thirty or so the class becomes unmanageable by a teacher. It is impossible for him to give any one the consideration he requires. Some are neglected totally, and all partially.

Taking thirty-five, then, as the maximum figure, we find that, as each student attends on an average at least two classes per Session, the number of teachers required

for the 3090 students at Edinburgh is 176, instead of 82. Even this number, however, would be too small, as there are some subjects which will never attract so great a number as 35 students out of 3000, and will always be studied by a very few. Taking, however, 176 as the required number of teachers, how could Edinburgh support them?

I make bold to say that its present income is amply sufficient to do so.

Allowing its 38 Professors an income of £600 per annum each—an income which, in Pamphlet IV., pp. 44-47, I have shown to be far too much in the case of Medical Professors, whose professorial position secures them very large emoluments, independent of the income attached to the chair. Allowing the 38 Professors £600 per annum each, this would absorb £22,800, and would leave a balance of £17,200 out of the £40,000 mentioned above. This balance might be thus allocated:—

£200 to each of 40 Sub-Professors.....	£8000
£100 ,, 92 University Tutors.....	9200
	<hr/>
	£17,200

This arrangement would bring the number of teachers up to 170, which is very nearly the number we found above to be absolutely required. And we might reach even that number by utilising some of the balance from the University Fund, and instituting six Lecturers at £250 each.

The teaching staff would then stand thus:—

Chief Professors, at £600 per annum each.....	£22,800
6 Special Lecturers,, £250 ,, ,,	1500
40 Sub-Professors ,, £200 ,, ,,	8000
92 University Tutors,, £100 ,, ,,	9200
<hr/>	
176 Teachers in all, at a total Salary of.....	£41,500

Glasgow University, with its £29,000 of teaching income, has 27 Professors and 28 assistants, or 55 teachers in all. For its 2275 students it ought to provide at least 130 teachers, and even with its present income it might support that number.

27 Chief Professors, at £600 per annum each.....	£16,200
30 Sub-Professors ,, £200 ,, ,,	6000
68 University Tutors,, £100 ,, ,,	6800

And from the balance of the General University Fund—

5 Special Lecturers, at £250 per annum each.....	1250
<hr/>	
130 Teachers in all, at a total Salary of.....	£30,250

Such a scheme as the above might, of course, be variously modified. The salary of some Professorships, for example, might be raised to £1000. These would then be regarded as the prizes in the Scottish educational system, and would be bestowed upon those who had in the lower grades distinguished themselves above all others. The salary of other Professorships might be somewhere

between £250 and £600, which are proximate in the above scheme. Any modification whatever might be introduced, so long as the principle of fixed salaries was adhered to.

The evils which crowd our University system I have already and frequently shown to be chiefly maintained by our utterly mistaken method of paying the Professors. When our Professors have no interest in enrolling larger classes than they are able to control, they will soon of themselves adopt a wiser method of teaching—they will soon advocate the increase of the Professors in a way they have never yet done—they will soon infuse with new life and vigour the Universities whose growth they are now doing much to arrest.

If it is considered that Professor Ramsay and Professor Jebb are each worth £2000 a year to the country, there surely can be no objection to give them that salary. But let their salaries be fixed at some figure, and let them have henceforth merely the interest which a teacher has in his pupils, and no longer the interest which a shop-keeper has in his customers—*the more numerous the better*.

In the above calculations I have almost exclusively taken into account the income expressly devoted to the teaching staff, and have not said anything of the general income of the Universities. It will be remembered that in Pamphlet III., pp. 1-16, the Bursary Funds at Glasgow University were discussed, and clearly shown to be absurdly managed. But is the so-called General

University Fund managed any better? The calendars do not give detailed accounts of income and expenditure, and without such accounts it is impossible to judge fairly of the funds. But it does seem remarkable that the Factorage of Glasgow University should cost over £500 a year, and that the upkeep of buildings and grounds should amount to over £3600. The Factorage in Edinburgh University costs only £290, and the upkeep £2400. On these two items alone the larger University of Edinburgh spends about £1400 a year less than the smaller and more recently erected one of Glasgow. Such a fact surely needs to be looked into and explained. Into the whole management of the Universities, indeed, whether financial or otherwise, an infusion of new life and new clearness is needed.

But this is by the way.

On any improved University system we will not require to increase the number of teachers so enormously as is proposed in the above scheme. The number of students in our Universities will be so reduced that a much smaller number of teachers will be needed. It is necessary, therefore, to adopt a method of calculation different from the above.

Last year 6228 students entered the Universities of Scotland. If we count 728 of these as aliens, we are left with the fact that 5500 natives of Scotland, or 1 in every 700 of the population, are attending the Scottish Universities. If Scottish University education, therefore,

meant anything, it would be an arithmetical fact that Scotland is the most learned of all nations, for Germany, which is admittedly so, has only 24,000 students, or about 1 in every 1800 of the population.

But Scottish University education means nothing.

For our 6228 students we have 113 Professors and Lecturers, or 1 for every 55.

In Germany the 24,000 students have 2000 Professors and Lecturers, or 1 for every 12.

To make us equal with Germany, our 6228 students ought to have 519 Professors, instead of 113.

But the majority of our students are unfit to enter a University, and a large proportion of them should still be in the Elementary Schools. Attendance at the University is merely a cloak to hide their ignorance and to deceive the people.

We may take it for granted that about 1 in 1800 of the population is the very utmost that should be in the Scottish Universities, and this would make a total of 2100, for which, in the proportion of 1:12, about 175 teachers would be needed.

We have seen that in Berlin University there were in 1864 183 teachers to 2500 students, and could we in Scotland have 175 teachers to our 2100 students, our proportion would be even better than that of Berlin.

Would it be possible with 2100 students to maintain a staff of 175 teachers?

The money which our four Universities devote to the

payment of their teachers amounts to about £84,000 per annum. If the students were reduced to about 2100 there would be a loss of fees to the amount of £40,000, leaving as teaching income about £44,000.

If then we had

40 Chief Professors	at £600 per annum each,		
60 Sub	„	at £200	„ „
75 University Tutors	at £100	„	„

The sum required to pay this staff of 175 teachers would amount to £43,500, or rather less than the sum left as teaching income by the above calculation.

This staff of 175 teachers also would be largely increased, and our Universities made unquestionably second to none in Europe, as soon as they were put upon an intelligible footing. For as soon as men are sure that the efforts of our Universities are directed purely to scientific, and no longer to professorial or personal aims, endowments will flow in from private sources which are now dried up by a just and well grounded fear of abuse.

But it is not necessary longer to continue these calculations of ours. I have at this point received documents which, if not official, have at least an official appearance. They seem chiefly to be portions of the draft of a Bill about to be introduced into Parliament, along with notes of what appears to be a carefully prepared speech in connection with the Bill to be introduced. It is needless to speculate about the hand to which we owe these documents. For my own part I suspect they come neither from the Lord

Advocate nor from Earl Rosebery. But inasmuch as they seem to shadow forth a great scheme which would renovate our whole Higher, and our Technical or Professional Education, I think I cannot do better than place them here at the end of this tiresome series of pamphlets, and wish them and my readers

“GOOD SPEED !”

THE SPEECH.

Κύκλωψ, εἰρωτᾷς μ' ὄνομα κλυτόν;

THE SPEECH.

IT is my privilege to-night to bring before the consideration of this House a subject in treating of which I trust the usual differences of party may be forgotten. Members of all political parties have a common interest in the spread of education. They will agree, one and all, in the desirability of placing University education in Scotland on as high a level as possible. There will no doubt be different opinions as to the methods we propose in this Bill, but these differences will not find their origin in the opposition of parties. They will merely consist of the ordinary variations which men who occupy different standpoints, and possess different characters continually manifest even when they examine a question with the most ardent desire to agree upon it. Such variations we shall welcome as likely to increase the value of our proposals by removing the imperfections which we are of ourselves unable to detect. We are, of course, desirous of passing this Bill as nearly as possible in the form in which it is drawn up, but we do not hold unreservedly to any of its clauses. We offer it in its present form to the wisdom of the House, and will be content should it be passed in a form and with a purpose only approximately ours.

Our purpose, as expressed in the preamble of the Bill, is to render the Scottish Universities capable of performing their proper functions, and I must, in the first place, endeavour to make plain what we consider such functions to be. The Scottish Universities have got into such a condition as to require that of us!

We may regard it as unquestionable that the Universities should not teach what it is possible to learn in the elementary schools of the country. The University apparatus for teaching—to speak of nothing else—is far too costly to admit of such a thing. Yet it is a startling fact that the Universities of Scotland have for many years been teaching the elements of Latin, of Greek, of Mathematics, and of English Composition, to hundreds of students who ought to have been taught these subjects in the elementary schools. Students in our Universities begin with the alphabet in Greek, with the first declension in Latin, and with the definitions in the First Book of Euclid! Absurdity in education could hardly go further than this. Unless our Universities were to undertake the teaching of the English alphabet to men who had never been to school, they could not possibly descend lower than they have already done.

It may also be regarded as unquestionable that the Universities should not require to teach what is already taught tolerably well in the secondary schools of the country. Hitherto the Universities have made it a plea that as there was no systematic secondary education in Scotland they have had to supply its want. This plea is a very question-

able one. It is possible that the case is the very reverse, and it may be because the Universities have undertaken the secondary education in Scotland—and with the most imperfect apparatus and the worst results—that the secondary schools in Scotland have languished as they have done. We need not, however, discuss that point. The secondary education in Scotland is now being placed on such a basis that that country will no longer lie under the reproach of having no system of higher schools.

In any organised system of education, then, the Universities should begin where the secondary schools leave off, just as the secondary schools should begin where the elementary schools end. But the system of education in Scotland is not yet properly organised, and we have to provide in this Bill for a transition state, and endeavour to make the Universities capable of their very highest functions, while enabling them still to continue some of those proper to the secondary schools. These latter may be thrown off as soon as such schools are fairly established in Scotland.

The purpose of this Bill, therefore, is to enable the Scottish Universities to carry forward the education of Scotland from the point it reaches in the secondary schools to the highest point attainable. We propose to make real Universities out of institutions that are now a mere compound of elementary and secondary schools with a very small admixture of the University properly so called.

In the Scottish Universities we have already Professors

who are capable of teaching the very highest subjects, but they are prohibited from doing this by the character of the students who occupy their class-rooms. They have to teach only what their students are capable of learning, and most of the Scottish students have had little education before entering the University. In short, there is a highly paid and highly cultured staff of teachers presiding over men who should mostly be under the care of the masters and assistants in the elementary and secondary schools. And we propose that as far as Act of Parliament can alter such an abnormal state of things, it shall be altered.

It will be plain, therefore, that the important changes proposed by this Bill are many in number, but they are all founded upon two main points, or rather upon one main point, for one of the two flows naturally from the other. The two fundamental changes proposed are ; (1) To make all the Universities of Scotland members of one educational system instead of the separate, and to some extent competing individualities which they are at present, and (2) To appoint Commissioners who shall in the first place and for a time constitute the one governing body by which they shall all be directed.

We propose that while each University preserves its autonomy they shall all be guided so as to work together for a common end. At present it is known to honourable members that one Scottish University is merely a repetition of the others on a larger or smaller scale. The same subjects are taught in all the Universities. There is no progres-

sion from one to another. There is no variety. Although there are teachers enough to overtake a very wide and extensive range of subjects, the students are confined to a very narrow range, which is repeated yearly with very little alteration. The result of this system can only be that, while it lasts, Scholarship in Scotland must have both a low standard and exceedingly narrow limits.

By the proposed changes it is hoped that Scotland may at last attain some eminence in scholarship and science, and it shall at any rate be the business of the Commissioners appointed under this Bill so to join together and co-ordinate the studies in the different Universities, that the wide field of knowledge may be covered somewhat more fully than is possible under the existing arrangements.

Such being the foundation of our scheme it will be necessary for me to explain somewhat in detail the mode in which our scheme is developed in the Bill before the House.

We propose appointing a commission, consisting of eight members, whose names shall be submitted for your approval at a later stage. The business of this Commission will be of two kinds. Its first business will be the reconstruction of the Scottish Universities upon the new basis defined by this Bill. The second will be the superintendence of these Universities after they have been so reconstructed. It is not in the meantime proposed that this particular Commission shall be a permanent factor in the administration of this country, but when its work of reconstruction is completed, and the Universities are fairly settled in their new and pro-

gressive career, we hope that some permanent body will be appointed to continue the work of supervision that will be necessary. We trust, indeed, that there may be, ere many years elapse, a Government Education Department, which shall take cognisance, not merely of elementary education as our present Education Department does, but of Higher Schools and Universities as well. We can never reach any position of permanency until we have such a Department, and by the time the Universities have reached the form which the Commissioners are to give them, and are ready for the simpler work of superintendence, we hope the secondary schools of Scotland will have reached such a position that superintendence will there also be the only requisite.

The powers of this Commission we have drawn out in some detail, in order to indicate fully the direction we wish the proposed changes to take, but we have left them with large powers of action even beyond the points indicated in the Bill. Our chief reason for doing so is the usual one, that it is impossible to provide expressly against every contingency that may arise, and the hands of the Commissioners must not be too much hampered in dealing with events that have not been foreseen.

We propose (clause 7, section 2) to fix the maximum salary of a Professor at £800. We are aware that this is little more than a third of the salary some of the Professors at present draw, but we look upon those large salaries as one of the very worst of the

abuses that oppress the Scottish Universities. It would be very pleasant to allow a large salary. It is always pleasant to be munificent in gifts, but we have to consult the claims of justice rather than of pleasure, and we must as nearly as possible proportion the payment to the value of the work done. Under the existing system it happens that those Professors who are doing the most elementary work have the highest salaries. Those whose work is of a higher kind have no students except such as cannot choose but attend them. And here I touch upon the great evil of the present mode of paying the Professors. They are paid according to the number of students attending their classes, and the tendency, of course, is to increase the number indefinitely—every increase representing an increase of salary to the Professor.

And how is this increase effected? By lowering the standard of admission; by lowering the standard of education, so that students who are ignorant of even English composition can enter these Universities. I do not of course mean that the gentlemen who are Professors in the Scottish Universities lower the standard of their teaching with the conscious design of increasing their salaries. I would be loath to believe that any one of them was actuated by such a base spirit. Without any such conscious purpose, however, merely by accepting as inevitable a lowering of education they could have done much to check, they have succeeded in effecting simultaneously an increase of their salaries, and a degradation of the educational standard.

We wish to change this completely, and to make the salary

of the Professor depend as much as possible on his scholarly and scientific attainments, and not at all upon the numbers who may crowd the benches to listen to him. The sum of £800, which is fixed in the Bill, we do not regard as absolute and unchangeable. Should the wisdom of this House decide that a larger sum is the just compensation due to a Professor, we shall willingly adopt the decision. In the same way the salaries named in the other sections of this clause may be changed, either now or afterwards, without any opposition from us. The only point on which we are absolutely decided is the principle of the fixation of the salaries.

In section *d* we provide for the appointment of other teachers besides Professors. This has long been a distinct want, and has been met very imperfectly, if at all, by the appointment in some instances of assistants to Professors. The tendency hitherto has been to have as few teachers as possible, and only one to each subject. We propose destroying this monopoly. We propose to have as many teachers as possible, and to promote a stimulating rivalry by allowing a junior, who has his spurs to win, the opportunity of taking up the same subject as a senior. This has proved most useful in Germany where the rivalry of younger men serves to keep the Professors constantly alert and progressive in their studies. A man whose salary and position are both assured has little external inducement to exert himself, and we propose placing, if not the salary, at least the position of Professors in constant peril, so that they may have a power-

ful external stimulus to support their internal purpose of keeping themselves abreast of the very foremost science of their time.

In sections *e* and *f* we indicate changes in the teaching arrangements, which the Commissioners may extend as they think fit. The purpose of the regulations regarding the number of lectures is to put an end to the cramming system which is so prevalent in Scotland. A student has from nearly every Professor about a hundred lectures in a Winter session, and when he attends two or three classes, it is impossible for him to digest the amount put before him. I have even known a student of medicine who attended four Professors one session, and heard accordingly four hundred lectures, besides attending hospital! This system of lecturing is derived from a time when such things as text books did not exist, and it is absurd to continue it as if books were still inaccessible. The student ought to have time to read and think outside of the range of his Professors' lectures, to compare what he hears from his teachers with the facts of Nature and of History.

In section 3 of this 7th clause we propose that no student enter the University till he is found fit to do so. At present, as we have said, any person, however uneducated, may enter a Scottish University, and this fact is even regarded by some as one of the great popular blessings the Scottish Universities confer upon the people. "These Universities," they say, "are really National Universities, because they exclude nobody, high or low, rich

“or poor, educated or uneducated; they are open to all.” We suspect there is a fallacy here. The Universities of Scotland have always been the Universities of the poor, although, from the increased expense attaching to them, they are less so now than they used to be. It is our intention that they should continue so. They have hitherto been free from restrictions of creed, or race, or caste. We intend that they shall continue so. But it is only within a comparatively recent period that they have admitted students who ought still to be learning Elementary English under the masters and assistants in the primary schools; and they do not, and never will possess teachers suitable for such students. We intend accordingly that such students hereafter shall not be admitted to the Universities. We intend that none shall enter them who are not fitted to benefit by University teaching.

It is difficult, however, to fix exactly the educational position that should be occupied by entrants to the Universities, and we require the Commissioners to consult with teachers of secondary schools before they fix it. We shall not require from the entrants attendance at such schools, for many Scottish students could not afford such attendance, but we shall require that they have by some means attained the same position as boys at such schools before entering the Universities.

By this regulation we hope that Scottish University students may become really learned and cultured men

without requiring to betake themselves to other countries with the view of becoming so. We look, indeed, for a farther beneficent result. The Universities of Scotland have always been the Universities of the common people, but there was a time when they were the Universities of the higher classes as well. By the constant degradation of their educational position during the past century, the gentry of the country have been banished from their precincts, and have had to resort to the schools and Universities in England for their higher education. In this way the rift between the higher and lower classes of the people has been increased, and their common interests diminished. To refer only to one thing—and that of supreme importance—the Church of the upper classes is generally Episcopal, while that of the lower is generally Presbyterian. This is nothing short of a national calamity, and we hope that by degrees, and very much through the operation of a well-arranged educational system, it may be remedied, and the classes of the people bound together by many common ties.

In the same section we provide that the students, when they have passed the entrance examination, shall be free of all the Universities. This is one of the corollaries from having a University system which embraces all the Universities, and will prove a boon to the students by giving them the widest possible choice in their studies. Up to this time students have been required to attend for at least two out of the four Sessions the University from which they seek their degree.

The fees we have fixed are rather under than over the existing fees, and will conduce to maintain the character of the Scottish Universities as the Universities of the people. The tendency hitherto has been gradually to raise the fees, and it is now more difficult than it was even a few years ago for a poor lad to gather sufficient funds to maintain him at the University. A diminution in the charges upon the student will be the result also of the lessened number of classes required for the degree.

Although, however, the number of classes is lessened, we do not propose to shorten the time of attendance at the University required for obtaining a degree. We hope that the Universities, by means of this Bill, may become really powerful agents in the education and culture of those who attend them. By the entrance examinations we hope to exclude merely nominal students. The number of students will therefore be diminished. There will be more direct intercourse between Professors and students. There will be less cram—more leisure for real study, and the spirit of learning will thoroughly pervade all the ranks within the University. We are disposed, therefore, to lengthen rather than shorten the time of attendance required, but we think the period of four years, which has hitherto been the usual time, is as long as can be fairly exacted in ordinary cases. There will always be a number, and, we hope, an increasing number, who will voluntarily remain for many more years within the University precincts.

By section 8 we propose to limit the degree-granting powers of the Universities. Hitherto each University has granted its own degrees, and the title of Master of Arts received from one University has had a different value from the same title received from the others.* We propose that the degree-examination shall be the same for all the Universities, and that there shall be only one degree given for examination—the degree of Doctor or Master. As it is granted for eminence in one department the recipient will be called Doctor or Master in Science, or in Literature, or in Theology, or in Medicine, or in any other department of study.

In this way the degree of Master, which has hitherto been of very uncertain significance, would be defined with tolerable clearness. By giving honours in special departments, so that a student could become M.A. with honours in Classics, or in Philosophy, or in Science, some definition was indeed formerly obtained, but we propose that this definition should begin with the ordinary, and not merely with the Honours degree.

It is implied by this, as honourable gentlemen will observe, that the separate degrees for Medicine, for Law, and for Divinity are cancelled. We are proposing, by a Bill which is to be presented to the House immediately, and which is essentially connected with this Bill, that henceforth the degree given in Medicine by the Universities will not amount to a licence to practise, but

*Vide Pamphlet III., pp. 20-23.—ED.

we hope that no subject of scientific study will be lost from the Universities on that account. We trust, indeed, that, freed from the necessity for "cram," all the University studies will be pursued in a more scientific spirit than has hitherto been possible.

It is almost needless to add, that we propose, also, to avoid the evil which so much depresses the spirit of the best students—the necessity of passing in all the degree subjects. We propose to encourage the profound study of special departments, rather than the superficial acquaintance with all. Hitherto the tastes, the desires, the special talents of the students have never been consulted. All, without exception, have had to undergo the same routine. The coursers of the sun have had to draw alongside the humble drayhorse. The injury thus inflicted has been both physical and mental, and the history of some of the best students has been a tragic condemnation of this system.

I need hardly trouble this House by going over the other clauses of the Bill, which are mostly taken up with details of business and finance, and will require full discussion at another time. My object has been to indicate the purpose of this Bill, and the changes we deem essential to the attainment of that purpose. It is impossible to delay much longer the reform of these Universities, and we think our proposals are such as to reform them with the least injury to vested interests and with ultimately the greatest benefit to the country.

THE UNIVERSITIES (SCOTLAND)

ACT, 18—.

“*Disjecta Membra.*”

THE UNIVERSITIES (SCOTLAND)

ACT, 18—.

WHEREAS the Universities of Scotland, that is to say, the Universities of Saint Andrews, Glasgow, Aberdeen, and Edinburgh, are no longer fitted to conduct the higher education of that country ;

Whereas on several previous occasions Commissions have been appointed to examine into the condition of the said Universities, and have made reports confirmatory of their unsatisfactory condition ;

And Whereas it is expedient that the said Universities should be as soon as possible rendered capable of performing their proper functions,—

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows :

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7. *Powers of Commissioners.*—The Commissioners shall possess and exercise the following powers:

(1) To take possession in the name of Her Majesty, and for the purposes and uses hereinafter specified, of all properties, monies, estates and possessions which are presently administered by the governing bodies of the Scottish Universities.

(2) To make the following regulations concerning Professors and other teachers—

(a) The Professors who hold appointments at present shall continue in office at a fixed salary of £800 per annum each, but in the case of those whose average salary during the past ten years, or since their appointment, if they have been appointed within that period, has been more than £800, there shall be added to the said fixed salary a sum equal to half the difference between £800 and the aforesaid average salary. Each Professor also shall have a house free of rent, or in the case of no such house being provided, an allowance of £100 per annum in lieu of it.

(b) When from any cause a Professorship becomes vacant, or when it is deemed advisable to appoint a new Professor, the Commissioners shall consult with the Principals of the Universities, and determine what subject or subjects are most needful to be taught, and shall endeavour to procure a Professor specially suited to supply that need.

(c) When a new Professor is appointed, his salary shall

be £400 for the first two years, and shall be increased by £100 every alternate year until it reaches £800, at which sum it shall remain fixed.

(d) Other teachers whose lectures shall be considered of equal value with those of the Professors are to be appointed wherever and whenever possible. These teachers shall be called Sub-Professors, and shall each receive an annual salary of £150. In all respects, save that of salary, they shall be equal with Professors.

(e) A Winter Course of Lectures shall consist of not less than forty, and a Summer Course of not less than twenty, shall be delivered at the rate of not more than two lectures per week.

(f) In addition to the meetings for the Lectures, there shall be three meetings of the Professor and his class every week, for the personal examination and instruction of individual students.

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(3.) To make the following regulations regarding students:

(a) All students entering the University must undergo a Matriculation Examination; and in determining the quality of this examination, the University Commissioners shall consult with the Professors and with the Head-

Masters of four recognised Secondary Schools in Scotland.

(b) When a student has passed the University Matriculation Examination, he may attend any of the Scottish Universities, and he may attend either one University during the whole of his course, or any University he may choose each session. And in any University he is free to choose any teacher or teachers, provided always that, on examination, he is found fit to attend the classes and teachers he may select.

(c) The fees paid by the students shall be fixed at three guineas per class each Winter Session, and two guineas per class each Summer Session; and the Matriculation fee of one guinea shall include the fees for both the Winter and the Summer Sessions. But any Professor may, with the approval of the Principal of his University, admit a student without payment of the fee, if it is shown that he has acquirements which fit him for a University career.

(d) Students' class fees shall be paid to the Treasurer of the University at the same time as the Matriculation fee, and the student shall then intimate what courses of lectures and what Professors he proposes to attend.

(e) To obtain the degree the student must attend on University instruction during four Winter Sessions, or during three Winter and two Summer Sessions—each Session, whether Winter or Summer, consisting of at least two classes. Attendance at two Summer Sessions will be accounted equal to one Winter Session.

(*f*) The Commissioners shall appoint examiners to conduct the examinations for the degree, who shall draw up the examination papers for all the Universities, and shall examine and value the replies given by the Candidates.

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(4.) To make the following regulations regarding Principals:—

(*a*) The Principals who are presently in office shall continue at a fixed salary of £1000 for each of the Principals of Glasgow and Edinburgh Universities, and £500 for the Principal of Aberdeen University.

(*b*) When from any cause the office of Principal in any University shall fall vacant the Commissioners shall appoint to the office one of the senior Professors of the University, and shall, as compensation for the added duties, make an addition of £200 per annum to his fixed salary as Professor, but in the case of the University of Saint Andrews there shall be retained only one Principal, as in the other Universities.

(*c*) The Principals shall (1) be the official Presidents of the Universities; (2) report to the Commissioners on all matters connected with the Universities: (3) on a

vacancy occurring in any University office, consult with one another and with the Commissioners as to the best method of filling it; (4) on receiving notice of the subjects of the Professors' intended lectures, consult with each other and arrange the courses of lectures throughout the Universities, so as to cover as much as possible of the field of knowledge, and meet, as far as possible, the necessities of the students, and when the courses are arranged, cause public announcement of them to be made not less than one calendar month before the beginning of the Session.

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(8.) To cancel the present division of University studies under faculties, and to remove the power of the Universities to grant any other degree but that of *Doctor* or *Master*.

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(12.) To submit to Her Majesty's Government a yearly statement of the condition of the Universities financially and otherwise, with an estimate of the money required

from Government to carry on the proper business of the Universities, in order that such estimate may be submitted to the House of Commons, along with the other estimates for the year.

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Cetera desunt.

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